DOCUMENT RESUME

ED 338 127 HE 024 940

AUTHOR	Stark, Joan S.; And Others
TITLE	Student Goals Exploration User's Manual: Institutional Research Guide. Preliminary Edition.
INSTITUTION	National Center for Research to Improve Postsecondary Teaching and Learning, Ann Arbor, MI.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	91
NOTE	201p.; For related document, see HE 024 939.
PUB TYPE	Guides - Non-Classroom Use (055) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC09 Plus Postage.
DESCRIPTORS	College Instruction; *College Students; *Educational Objectives; Higher Education; *Institutional Research; *Research Methodology; Scientific and Technical Information
IDENTIFIERS	*Student Goals Exploration

ABSTRACT

This manual, the second part of a guide to assist colleges in field-testing the survey instrument "Student Goals Exploration" (SGE), is a technical treatment for use by researchers. The SGE is a survey designed to measure student goals for attending college and for enrolling in specific courses. Section I, "About the Student Goals Exploration," gives an overview of the uses and structure of the SGE including theory and assumptions, selecting the appropriate version, sample uses, description of the sections, overview of the scales, and scale items and interpretation. Section II covers uses in institutional research: research versions; sample uses; and how to select the information to be collected, add local goal items, select the student samples, administer and score the survey, develop group profiles, link with other data bases, and report results. Also presented are cautions and limitations. Section III, "Technical Information," includes steps in developing the SGE, description of pilot test samples; derivation scales; and data on scale intercorrelations, reliability, discriminate validity, concurrent validity, and gender comparisons. Section IV contains three institutional research versions of the SGE and the faculty perspective version. Appendixes provide computer coding and data processing instructions, typical group profiles, and a reserve items pool. Includes 19 references. (JB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Copyright © 1991 by the Regents of The University of Michigan
for the National Center for Research to Improve Postsecondary
Teaching and Learning. All rights reserved.

The project presented, or reported herein, was performed pursuant to a grant from the Office of Research of the Office of Educational Research and Improvement/Department of Education (OERI/ED). However the opinions expressed herein do not necessarily reflect the position or policy of the OERI/ED or the Regents of the University of Michigan should be inferred.

Student Goals Exploration User's Manual

Institutional Research Guide

Preliminary Edition

Joan S. Stark, Malcolm A. Lowther,
Kathleen M. Shaw, and Paula L. Sossen

National Center for Research to Improve
Postsecondary Teaching and Learning
(NCRIPTAL)

2400 School of Education Building
University of Michigan
Ann Arbor, Michigan 48109-1259
(313) 936-2741

Copyright © 1991 by the Regents of The University of Michigan
for the National Center for Research to Improve Postsecondary
Teaching and Learning. All rights reserved.

The project presented, or reported herein, was performed pursuant to a grant from the Office of Research of the Office of Educational Research and Improvement/Department of Education (OERI/ED). However, the opinions expressed herein do not necessarily reflect the position or policy of the OERI/ED or the Regents of the University of Michigan should be inferred.

STUDENT GOALS EXPLORATION
USER'S MANUAL

Institutional Research Guide
Preliminary Edition

Preface

The goals students have for attending college and for enrolling in specific courses have an impact on educational outcomes. These goals can be measured with a comprehensive survey instrument such as the Student Goals Exploration (SGE). When appropriate goal profiles are available, college instructors and researchers can relate them to other student characteristics, guiding efforts to improve teaching and learning.

This User's Manual was prepared to assist colleges in field-testing the Student Goals Exploration (SGE). The manual is divided into two Guides with a common introduction to the SGE: (1) A Guide for Classroom Research by faculty members and academic administrators, and (2) A Guide for Institutional Research by those desiring to link the SGE results with other data bases. This Institutional Research Guide also contains technical information needed to gain a detailed understanding of the SGE's scales and development. Each Guide contains an appropriate field test set of SGE inventories as well as coding instructions and examples of ways to report findings.

National Center for Research to Improve Postsecondary Teaching and Learning
(NCRIPTAL)
2400 School of Education Building
University of Michigan
Ann Arbor, Michigan 48109-1259
(313) 936-2741

STUDENT GOALS EXPLORATION

User's Guides and Technical Report

Suggestions for the Reader:

We have divided this User's Manual into two Guides so that faculty members who desire to use the Student Goals Exploration in their classrooms can do so without reading technical material that is interesting primarily to other types of researchers. Select the most appropriate of the two User's Guides: The Classroom Research Guide is a non-technical treatment for use by faculty members in their classes. This Institutional Research Guide is more helpful for studies involving several classrooms and also provides a technical summary of the SGE's development and characteristics. Section 1, an overview of the uses and structure of the SGE, is included in both Guides.

Student Goals Exploration User's Manual
Institutional Research Guide
Preliminary Version

Table of Contents

SECTION I. ABOUT THE STUDENT GOALS EXPLORATION 1
1. Introduction 1
2. Theory and Assumptions 3
3. Selecting the Appropriate SGE Version 6
4. Sample Uses for the SGE 8
5. Sections of the SGE 10
6. Overview of the SGE "Scales" 10
7. Scale Items and Interpretation 15

SECTION II. USING THE SGE FOR INSTITUTIONAL RESEARCH 41
1. Uses in Institutional Research 41
2. Institutional Research Versions of the SGE 41
3. Examples of SGE Uses 42
4. Selecting the Information to Be Collected 45
5. Adding Local Goal Items 46
6. Selecting Student Samples and Administering the SGE 47
7. Scoring the SGE 48
8. Developing Group Profiles 49
9. Linking With Other Data Bases 55
10. Reporting Results 56
11. Cautions and Limitations 57
12. Conclusion 58

SECTION III. TECHNICAL INFORMATION 59
1. Steps in Developing the SGE: 1986-1990 59
2. Pilot Test Samples for the SGE: 1986-1990 60
3. Derivation of the Scales 64
4. Scale Intercorrelations 70
5. Reliability 78
6. Discriminant Validity 78
7. Concurrent Validity 79
8. Gender Comparisons 84

SECTION IV. THE SGE INVENTORIES 85
Institutional Research Versions (IR-1, IR-2, IR-M) 87
Faculty Perspective Version 114

APPENDIXES 119
1. Computer Coding and Data Processing Instructions - Institutional Research Versions 121
2. Typical Group Profiles 123
3. Reserve Items Pool 139

REFERENCES 141

ACKNOWLEDGEMENTS 142

List of Tables

1. Versions of the Student Goals Exploration 7
2. Groups of Items Included in the SGE Institutional Research (IR) Versions 14
3. Groups of Items Included in the SGE Classroom Research (CR) Versions 14
4. Index of SGE Sections and Scales 14
5. Goals for Attending College Scales 16
6. Goals for Attending College Scales 17
7. Goals for Attending College Scales 17
8. Subject-Specific Goals in Taking This Course 19
9. Subject-Specific Goals in Taking This Course 19
10. Subject-Specific Goals in Taking This Course 20
11. Subject-Specific Goals in Taking This Course 20
12. Subject-Specific Goals in Taking This Course 21
13. Subject-Specific Goals in Taking This Course 21
14. Subject-Specific Goals in Taking This Course 22
15. Subject-Specific Goals in Taking This Course 22
16. Subject-Specific Goals in Taking This Course 23
17. Subject-Specific Goals in Taking This Course 23
18. General Academic Orientation Scales 26
19. General Academic Orientation Scales 26
20. General Academic Orientation Scales 27
21. General Academic Orientation Scales 27
22. General Academic Orientation Scales 28
23. General Academic Orientation Scales 28
24. General Academic Orientation Scales 29
25. General Academic Orientation Scales 29
26. General Academic Orientation Scales 30
27. General Academic Orientation Scales 30
28. General Academic Orientation Scales 31
29. General Academic Orientation Scales 31
30. General Academic Orientation Scales 32
31. General Academic Orientation Scales 32
32. General Academic Orientation Scales 32
33. Feelings About Studying in This Course 33
34. Feelings About Studying in This Course 33
35. Feelings About Studying in This Course 34
36. Feelings About Studying in This Course 34
37. Feelings About Studying in This Course 34
38. Expectations and Study Skills in This Course 37
39. Expectations and Study Skills in This Course 37
40. Types of Activities Pursued in This Course 38
41. Types of Activities Pursued in This Course 38
42. Types of Activities Pursued in This Course 39
43. Types of Activities Pursued in This Course 39
44. Summary of Items on Goals for Attending College Scales 50
45. Summary of Items on Subject-Specific Goal Scales 50
46. Summary of Items on General Academic Orientation Scales 51
47. Summary of Items on Feelings About Studying in This Course/Major Scales 51
48. Summary of Items on Expectations and Study Skills Scales 52
49. Summary of Items on Types of Activities Scales 52
50. Characteristics of Colleges Collaborating in Pilot Tests (Version C) 61
51. List of Course Types Included in the Survey 62

52. Distribution of Student Respondents by Introductory Course and Version of SGE 63
53. Characteristics of Student Response Groups 65
54. Characteristics of Participating Students in Collaborating Colleges (Version C, Fall, 1989) 66
55. Nine General Academic Orientations Toward the Major 68
56. Rank Order of Mean Scores on Subject-Specific Scales 68
57. Correlations of Goals for Attending College (N = 1150) 71
58. Correlations of General Academic Orientations (N = 1164) 72
59. Correlations of Subject-Specific Scales (N = 1125) 73
60. Correlations Between General Academic Orientation Scales and Subject-Specific Scales (N = 1122) 74
61. Correlations of General College Goals and General Academic Orientations (N = 1134) 75
62. Correlations of Goal Attribute Scales and Levels of Confidence Scales 76
63. Correlations of Academic Orientation Scales with Goal Attributes and Levels of Confidence Scales 77
64. Correlations of SGE with Learning-oriented (LO) and Grade-oriented (GO) Scales 80
65. Correlations of SGE Scales With Need for Cognition Scales 82
66. Correlations of SGE Scales with Goal Instability Scale 83

List of Figures

1. General Framework for a Student Goals Inventory 5
2. Sample Profiles of Student and Faculty on SGE Scales (Version C Data, N = 114) 53

SECTION I. ABOUT THE STUDENT GOALS EXPLORATION

1. Introduction

During the 1980s college administrators and faculty members increased their attention to strategies for improving teaching and learning. Among other strategies for enhancing student learning, faculty members have been urged to set high expectations, increase curricular coherence, and foster active student involvement. Concurrently, educators have discussed how to assess the results of their efforts, that is, to determine if students are learning what faculty intend them to learn.

Assessment advocates have considered two levels of data collection about student learning. One level of assessment, first proposed by state policy makers and accreditors, involves measuring students' learning outcomes and aggregating the results for programs or colleges. The primary purposes of aggregation are to ensure public accountability of colleges and to formulate institutional or state-wide improvement policies. Many of the early discussions of assessment, centering on the state, institutional, and program level of measurement, were not well-received or understood by faculty members and administrators. Another level of assessment was proposed by those who believe that the best chance of improving student learning rests with the initiative of individual instructors. This grass roots level of assessment, linked closely with instructional improvement, has come to be called "classroom research" (Cross and Angelo, 1988).

The case for classroom-level assessment is strengthened by recent advances in cognitive psychology. These advances indicate that (1) learning is improved if teachers communicate course objectives and discipline structure to students, (2) coherence depends on how well students integrate new knowledge with old, and (3) strategies that help students integrate new knowledge can be taught. This emphasis on *how learning occurs* as well as *what is learned* has helped to show that learning involves not only acquiring facts and principles, but also increasing one's motivation and self-confidence about learning and acquiring useful learning strategies. In recent conference agendas, these ideas have joined the discussions of institutional assessment to provide a balanced assessment agenda at the classroom and college levels for improving teaching and learning.

During assessment discussions educators are mindful of student differences. Both faculty members and measurement experts recognize that mediating variables, such as a student's age, gender, socioeconomic background, and prior academic preparation, affect what is learned and should be considered when interpreting measures of student outcomes. Faculty often relate to subgroups of students based on informal assessments of such characteristics. Measurement experts, on the other hand, attempt to control statistically for the effects of student differences when making comparisons. To cite an example, if an open-admission college serves an urban area with many under-prepared students, this fact must be considered when student achievement is compared with a nearby residential university serving well-prepared students. To give another example at the classroom level, when one instructor's class has strong academic background or special abilities, these attributes must be taken into account when comparing class achievement with that of a more academically typical class taught by another instructor. Some academic program reviewers judge it appropriate to adjust standards for different groups of students, examining their progress in terms of their initial knowledge or skill, an approach often called "value-added" measurement. Despite controversy over the measurement techniques, many educators favor this "value-added" concept of progress. Whether student progress is measured against a specified criterion or through a value-added approach, it is customary to take account of readily observable student differences, such as

gender or age, and to control statistically for differences in preparation that are detected by aptitude or achievement tests.

In contrast with observed student characteristics or academic aptitudes, variations in student goals and related motivational differences among students have seldom been included as mediating variables when student outcomes are assessed. This is true even though the standards against which student progress are measured typically stem from goals of faculty, administrators, or legislators. In fact, educators only rarely mention the goals students bring to the classroom, how these goals affect what is learned, or how student goals may change. Over 2,300 teachers of introductory college courses told us in a recent survey that, compared with student characteristics such as preparation and ability, they viewed student goals as relatively unimportant in planning their courses (Stark et al. 1990). One reason for this finding may be that instructors do not know the course goals of their students. Yet, both good course planning and accurate interpretation of assessment data may depend upon students' views of important outcomes. What they value and hope to achieve stimulates their learning involvement and effort.

As we reviewed relevant research literature, we developed a better understanding of why student goals have been neglected in assessment discussions. In short, student goals are neglected because there have been no useful instruments to measure the goals students bring to courses. Educators have measures of broad goals for attending college, typologies to classify students based on these broad goals, surveys of activities students pursue during college, inventories of student satisfaction, and surveys to tap student opinion of the college's environment and goals. We have summarized these various measures elsewhere (Stark, Shaw & Lowther, 1989). But we found no inventory to assess student goals for a specific course or to help relate these goals to other characteristics or to student learning. We concluded that such an instrument was needed.

After considering several possible models, we developed a theoretical framework for a student goals inventory (Stark, Shaw and Lowther, 1989). Based on this framework, we developed and pilot-tested the Student Goals Exploration (SGE) over a five-year period. The SGE is now suitable for field testing. This preliminary user's manual is to guide those at colleges and universities who wish to be involved in field-testing the SGE.

We wish to make the SGE useful to educators responsible for fostering educational improvement at each of the levels of assessment we mentioned earlier--the programmatic or institutional level, and the classroom level. Since educators working at these two levels will need to use different research strategies, we developed two sets of SGE inventories and two User's Guides: The Institutional Research Set and the Classroom Research Set. Each set of inventories comprises three versions, each of which can be used at a different point in a student's education. Both sets of inventories were designed to help understand group characteristics, rather than to counsel or advise individual students. (For a list of the SGE versions and recommended uses, see Table 1.)

The Institutional Research Set is useful for collecting data about goals of students in multiple classes or programs. The data collected are extensive and allow theoretically-based explorations of relationships among self-reported variables that may influence students' college and course goals. The versions of the SGE within the Institutional Research Set are similar in format and length to the instrument we used for research on student goals when developing the SGE. This set may be used in program or college assessment by those familiar with social science research techniques. Such users will find this User's Guide for Institutional Research, which contains technical information about the SGE, most helpful.

The Classroom Research Set is for classroom instructors, working alone or with a few colleagues. It is designed to help instructors understand the goals of students in their classes, to facilitate two-way communication about the relationship between students' and teacher's goals, and to allow the teacher to examine goal change informally over the course of a term. Faculty members interested in these uses of the SGE will wish to read the Classroom Research User's Guide.

2. Theory and Assumptions

Our work in developing the SGE has been based on a theoretical framework we derived from appropriate literature and exploratory interviews with students taking introductory college courses. A complete summary of the theoretical background is given in another source (Stark, Shaw, & Lowther, 1989). We have summarized below the key assumptions we drew from the literature and interviews.

1. In the simplest and most basic terms, goals are what individuals hope to achieve. Such intentions motivate and direct human behavior. As do people in general, college students attempt to behave in ways they see as useful and valuable. Students monitor and revise both the value they attach to goals and the goals themselves in accord with their perceived successes and failures.

2. Students have broad goals for attending college but, within the orientation provided by these broad goals, they also have specific goals for particular courses they take or majors they choose.

3. Students' goals for a course may not be as realistic, specific, clear, comprehensive, or challenging as the goals their teacher holds for the course. Some students may accept, more readily than other students, goals that are assigned by an outside source such as parents or teachers.

4. Many, but not all, college students are able to articulate their goals. Some are still developing awareness of their own goals and have difficulty stating them without prompts. They may also be in the process of acquiring new goals. Thus, they respond more completely to survey type lists than to open-ended queries.

5. A student's goals for a specific course are multidimensional. They may encompass a variety of different intellectual, personal, vocational, and social dimensions.

6. Students' goals for courses may change while taking a course. Sometimes, but not always, the change is what the teacher intends. If they und rstand the teacher's goals, students may be more likely to revise their goals for a course to be more like their teacher's.

7. Students' goals for a course are linked with their feelings of self-confidence in a particular academic subject, with prior preparation in that subject, with study strategies, and with a variety of specific goal attributes, such as whether the goals are self-generated or assigned by others and whether they are long-term or short-term.

8. Students' course goals influence their motivation to learn specific course material, their reaction to course activities, and the type and intensity of effort they exert in course-related tasks.

9. The effort students exert in academic tasks influences their learning outcomes. These outcomes may include attaining their own goals as well as those assigned to them by others.

We represented these ideas graphically and interrelated them in a general framework to guide development of a student goals inventory as shown in Figure 1 below.

In the conceptualization shown in Figure 1, we assume that students' general college goals precede the goals they hold for a specific course. Students bring to college previous experiences that lead them to develop expectations about whether they need a specific course, whether they will enjoy it, and how well they will perform in it. At both college and course levels, we show the possible but unverified influence of general motivating factors (such as expectations and self-assessment) as well as preparation. These issues are important at both college and course levels because the self-confidence a student feels about college in general may not transfer to a specific course, nor is preparation for the specific course the same as preparation for college generally.

In using this broad scheme as a guide for developing our inventory, we focused our attention on the "fuzzy" concepts of goal patterns shown in the shaded areas of Figure 1. Since we had found no instrument that provided descriptive measures of these goal patterns, we tried to build one that would describe them multidimensionally for college goals and for specific courses. Most of the questions we included in the Student Goals Exploration are intended to portray profiles of student groups on these two sets of goal patterns.

In our research inventory, we also asked students to report information pertinent to some of the other elements of the model, such as their background characteristics, academic preparation, and their extent of satisfaction with that preparation. (Sometimes information on background characteristics can be gathered from college files instead of asking the student to report it, but the students' *perceptions* of their backgrounds are not available from files.) To measure some of the constructs shown in Figure 1, we incorporated segments of psychological and motivational surveys developed by others. For example, to assess course expectancy, self-assessment of preparation, learning strategies, and self-efficacy, we used items from the Motivated Strategies for Learning Questionnaire (Pintrich et al. 1989). To obtain reports of student effort, that is, activities they pursued outside of class, we borrowed questions from Pace's early work on the Quality of Student Experience Survey (Pace, 1975, 1987). Each of these sets of questions, drawn from other sources, will be described in more detail later.

To complete our exploration of the theoretical framework, we need to examine more fully the relationships among the various elements in Figure 1. We know more about these relationships now than we did a few years ago but much remains to be discovered. We will continue studying them as more data are acquired.

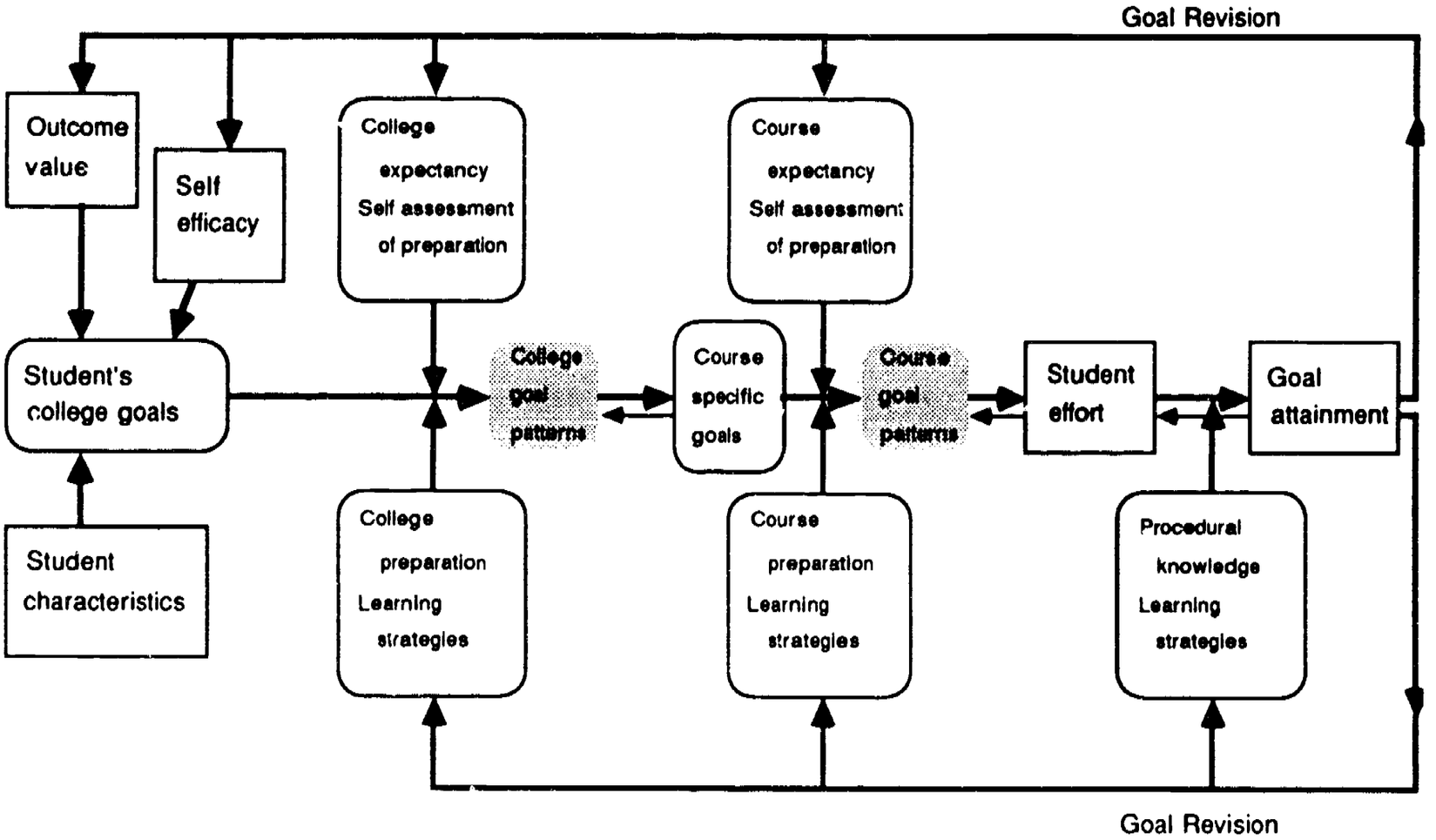


Figure 1. General framework for a student goals inventory.

Note: Shaded boxes indicate hypothesized multidimensional patterns.

3. Selecting the Appropriate SGE Version

In the discussion that follows, we describe the potential uses of the SGE that caused us to build two sets of inventories from our research instrument.

There are two sets of SGE inventories, an Institutional Research Set and a Classroom Research Set. They differ in purpose, intended audience, length, and how they should be administered. When selecting the appropriate SGE Inventory Set to use, potential users should consider carefully both their intended purposes and their intended audience.

The **institutional research** (IR) versions of the SGE are primarily for use by researchers or academic leaders who are interested in identifying broad goal patterns among groups of students in a program or an entire college. Such researchers may wish, in the simplest case, to describe goals of students majoring in a field. In a more complex instance, they may desire to add students' goal profiles to an existing data base. This would allow study of the relationship of goals to other variables, such as entering test scores, grade point averages, or measures of specific student outcomes.

College administrators may want to examine whether the goals of groups of students change over time, possibly as a result of particular courses, sequences of courses, or the entire college experience. For such longitudinal studies there are three IR versions to use at different points in a student's education. Those most interested in the results of these types of SGE studies typically will be groups of faculty or academic decision-makers. To identify any changes, the institutional researcher will need to sample the student population appropriately and apply suitable statistical tests. He or she will also need to tailor the technical report to the audience. Because of the many influences students experience during college, the researcher needs to exercise particular care in attributing student change to any particular educational experience.

The SGE set for **classroom research** (CR) is shorter than the IR set and can be used by an instructor in a course. Like the IR set, the CR set also has three versions for use at different times. The audience is the class and instructor (or, possibly, a group of classes and instructors). Since the primary classroom purpose is to improve communication between faculty and students, it is not essential to link the information with more comprehensive data bases, and statistical comparisons usually are irrelevant. Class discussion generated by the SGE-CR likely will focus on the importance of particular goal items and patterns within a specific discipline, probing how the goals of students and teacher compare or how they change during the semester. At the suggestion of classroom teachers preparing to field test the SGE, we have prepared a brief parallel version, the Faculty Perspective Version, to help faculty members record the goals they hope their students will have.

In the Classroom Research set, some of the sections and several background questions are designated "optional" to allow instructors to ensure student confidentiality if desired. Detecting goal change with the SGE does require some student identification to match responses, however. In the User's Guide for Classroom Research, we discuss some suggestions for assuring confidentiality when desired and provide guidance about how to interpret changes in student responses.

Table 1

Versions of the Student Goals Exploration

	Course		Major field	
	Time 1 (pre-test)	Time 2 (post-test)	Time 1 (pre-test)	Time 2 (post-test)
SGE-IR Institutional research (full version)	IR-1	IR-2	IR-M	IR-M
SGE-CR Classroom research (brief version)	CR-1	CR-2	CR-M	CR-M
SGE-Faculty Perspectives (course goals only)	Faculty (any time)	–	Faculty (any time)	–

Table 1 is a chart showing the two sets of Student Goal Explorations, each of which includes three parallel versions. In both the CR and IR versions labeled #1 and #2, students respond for a particular course in which they are enrolled. In the versions labeled M, students respond in terms of the major field they have chosen. The first of the three versions (IR-1 or CR-1) is intended for use at the beginning of the course or as a pre-test in a longitudinal study. Another version (IR-2 or CR-2) is used at the end of a course, or as a post-test when the pre-test has been given. The "major field" versions (IR-M or CR-M) can serve as both pre-test (at the beginning of the major) and post-test (near graduation), or, alternatively, the major field versions can be a post-test when one of the other versions in the set has been given as the pre-test. Faculty members use the "faculty perspective" version before administering the student versions.

The purpose of the SGE administration determines what sections of the instrument are most important and which students should complete them. An institutional researcher administering the SGE-IR Set may randomly select students from multiple sections of a large course. He or she hopes to minimize differences due to instructor influence and to maximize student response rates, the number of variables collected, and reliability and validity.

A classroom instructor who plans to discuss course goals with students, on the other hand, will ask all students in the class to respond. When using the briefer SGE-CR, full discussion typically is more important than the statistical properties of the indices in the SGE. An example serves to illustrate this point: We have found that students answering the SGE in introductory mathematics courses often respond that "learning to solve problems" is a goal, but students in history courses do not find that goal important. Assuming that the history instructor views this as an opportunity to expand student horizons, discussion might focus on what problem-solving means in history, how historians go about solving problems, and so on.

In each SGE set, we have included opportunities for the researcher or classroom instructor to add goal items of unique or local interest. For example, instructors in a college with a religious

mission might wish to add college-wide and course-specific items that tap religious goals. A biology instructor whose goal is to raise environmental consciousness may wish to expand the number of goal items related to this aspect of the course.

To help the user, we describe below some ways in which the SGE could be used, and provide some hypothetical examples. After describing the parts of the SGE and its indices, we will return to these examples for further explication of institutional research possibilities in Section 2 of this Guide. More detail about classroom research possibilities is given in the Guide for Classroom Researchers. Campus researchers who may be called upon to assist faculty members in studying goals in a course or courses should read that Guide as well.

4. Sample Uses for the SGE

Uses of the Classroom Research Version (SGE-CR)

1. *Purpose:* To help understand the goals of groups of students newly enrolled in courses, including the special goals of any existing subgroups of students.

   Administration: CR-1 near beginning of term; faculty members may wish to complete the Faculty Perspective Version of course goals.

   Audience: The instructor and students discuss the congruence of their goals, the meaning of the goal statements to them, how the planned course activities relate to goals.

2. *Purpose:* To assess changes in the goals of a group of students during a semester or year of enrollment in a course (or a program) of study.

   Administration: CR-1 at beginning of term (or CR-M when major is elected). CR-2 at end of term (or CR-M near graduation)

   Audience: The instructor; the faculty members in an academic department; possibly groups of graduating students or recent program alumni.

3. *Purpose:* To assist a faculty group in planning courses that will capitalize on student goals.

   Administration: CR-1 at beginning of term or CR-M when major is elected.

   Audience: Faculty committee examining course purposes, sequences, and activities to improve student motivation or to better serve students.

Uses of the Institutional Research Version (SGE-IR)

1. *Purpose:* To measure student goals as a mediating variable between intended student outcomes and actual student outcomes. Specific instructional plans or strategies may be used as experimental treatments.

   Administration: Use IR-1 or IR-M at beginning of specific course or major. Results may be entered into data base with other pre-test measures such as aptitude, achievement, placement tests and outcome measures.

   (Note that for a shorter and less comprehensive survey, CR-1 or CR-M could be used.)

   Audience: Academic department faculty; college administrators, accreditors, state boards, or other agencies that should be encouraged to interpret outcome data in terms of information about pre-existing student goals.

2. *Purpose:* To explore the relationships between students' course-level (or major level) goals and their feelings about studying, their expectations and study skills, their college-level goals, and, at the term's conclusion (or graduation), the types of activities pursued while enrolled in a course. Some of these potential relationships were shown earlier in Figure 1.

   Administration: IR-1 and IR-2, or two administrations of IR-M, or a serial administration of IR-1, IR-2 and IR-M.

   Audience: Academic department faculty; college administrators, accreditors, state boards--wherever the outcome data are sent and should be interpreted in light of student goals. Also educational researchers.

We encourage users of the SGE to be creative in adding appropriate items and in regrouping items in ways meaningful to specific disciplines and types of courses. Even so, at this point in our brief discussion of uses and audiences of the SGE, there are some cautions we must mention:

1. Students answering all versions of the SGE keep in mind a specific course or major. As a result, students responding for each different course or major are, in essence, responding to different surveys. Thus, while it is appropriate to aggregate the responses of all students reporting their goals for history courses, for example, no version of the SGE is currently intended for use throughout an entire college. In short, SGE data *CANNOT BE AGGREGATED TO CREATE A TOTAL INSTITUTIONAL PROFILE* because students are responding in terms of specific classes or majors, not their entire college experience. Currently, some of our field test collaborators are experimenting with asking students to respond to the course goals items with their total college "general education" in mind. Results will be forthcoming.

2. The SGE is intended to help understand goals of groups of students. Student scores may be entered into a data base that is used for making or confirming predictions about groups studying the same subject, but the scores are not reliable for single students. The SGE is *not intended to be used as a source of data for counseling or advising individual students.*

3. There are no "norms" for the SGE since there are no "right" goals for students and teachers to hold. Even for the same types of course, appropriate goals may differ from college to college. We encourage colleges and instructors to establish their own goals.

4. Users in community colleges and in courses not included in our pilot studies should examine the course-specific goal items and add items unique to their settings. Thus far, the SGE has been pilot-tested only in four-year colleges.

5. Although we suggest adding goals to the SGE to be sure specific course goals are covered, we urge that all items currently included be retained even if they seem irrelevant. It is often important to discover that what seems irrelevant to the instructor may not seem so to the student, or the reverse.

6. Even without discussing their answers, students' reflections on their answers to a pre-test may affect how they respond to a post-test. Students who discuss SGE results with their instructors are likely to be influenced even more. Therefore, it is best to pursue only one of the several uses of the SGE with students in a single class section. If the purpose of using the SGE in one class is to collect data at two points in time to gain a rough measure of change, do not discuss the congruence between student and teacher goals with that class. If the purpose is to engage students in discussion, a longitudinal study of goal change should not be planned.

5. Sections of the SGE

Within each set of SGE inventories, certain groups of items are identical, while others are modified to suit the particular purpose or stage of the student's education. For example, inventories designed to be used with students in the major field contain modified versions of questions directed at students in introductory courses.

Table 2 summarizes the parts of the SGE for Versions IR-1, IR-2 and IR-M. Shortly, we will describe the indices derived from each part of the SGE.

6. Overview of the SGE "Scales"

In Table 4, we summarize the indices or "scales" that we have derived during pilot tests from each section of the SGE. These "scales" do not meet the full technical definition of scales; rather they are groups of related items that can be readily interpreted as representing a goal construct. The list of scales given is for the most comprehensive inventory, the IR version. As noted in Table 3, some scales were derived from optional parts in the CR version. Following this overview, we discuss each scale, its meaning and the items comprising it. In Table 4, we show the number of items on each scale and a measure of its internal consistency. Internal consistency indicates the extent to which the items seem to tap the same idea; 0.00 indicates no consistency, 1.00 is the greatest possible consistency. We will discuss the uses of the scales for institutional research in Section 2 and for classroom research in the Classroom Research User's Guide. Readers who are interested in additional information about the development of the item pool and the statistical derivation of the scales should refer to Section 3 of this Institutional Research Guide.

Table 2

Groups of Items Included in the SGE Institutional Research (IR) Versions

Groups of items (purpose)	IR-1 (Items)	IR-2 (Items)	IR-M (Items)
Goals in attending college (Students' college goals)	X (19)	X (19)	-
(Students' perceptions of goal congruence with their teachers)	X	X	-
Locally inserted items	(6)	(6)	(6)
Statements of students' purposes in college	X (7)	X (7)	X (7)
Goals for a specific course (or major) (Obtain score on typical scale for course or major; obtain profile of 15 general academic orientations; examine responses to specific questions of interest)	X (110)	X (110)	X (110)
Locally inserted items	(20)	(20)	(20)
Feelings about studying in course (or major) (Obtain profile of five goal attributes)	X (18)	-	X (18)
Expectations and study skills in course (or major) (Obtain two measures of self-confidence toward course)	X (18)	X (18)	X (18)
Student information (Obtain demographic information, educational and career aspirations, perceptions of academic preparedness, satisfactions and uncertainties about college)	X (31)	X* (22)	X (29)
Locally inserted items	(9)	(9)	(9)
Types of activities pursued in this course (or major) (Obtain end of term reports of activities students pursued.)		X (22)	X (22)
Preference for ways courses are organized in this major			X (7)

Notes: * Student information section is truncated in Version IR-2 since it is assumed that this versions will be matched by student number with pre-test surveys from IR-1.

Table 3

Groups of Items Included in the SGE Classroom Research (CR) Versions

Groups of items (purpose)	CR-1 (Items)	CR-2 (Items)	CR-M (Items)
Goals in attending college (Students' college goals)	X (19)	X (19)	– (19)
Locally inserted items	(6)	(6)	–
Statements of students' purposes in college	X (7)	X (7)	X (7)
Goals for a specific course (or major) (Obtain score on typical scale for course or major; obtain profile of 15 general academic orientations; examine responses to specific questions of interest)	X (110)	X (110)	X (110)
Locally inserted items	(20)	(20)	(20)
Student information I (Obtain demographic information, educational and career aspirations, perceptions of academic preparedness)	X (13)	X (13)	X (17)
Types of activities pursued in this course (or major) (Obtain end of term reports of activities students pursued.	–	X (22)	X (22)
SECTIONS TO CHOOSE			
Feelings About Studying in course (or major) (Obtain profile of five goal attributes)	X (18)	–	X (18)
Expectations and study skills in course (or major) (Obtain two measures of self-confidence toward course)	X (18)	X (18)	X (18)
Student information II* (student satisfaction, personal information)	(7)	(6)	(9)
Locally inserted items	(15)	(15)	(15)

Notes: * Parts of the student information section are designated as optional modules in SGE-CR. It is assumed that this information may not be useful to all classroom instructors and may be considered intrusive by some students, especially those enrolled in small classes.

Table 4

Index of SGE Sections and Scales

Title of Section	Items	Consistency
GOALS IN ATTENDING COLLEGE SCALES:		
Prepare for career and/or graduate/professional school	6	.69
Acquire a general education	9	.83
Nondirected	4	.69
EDUCATIONAL PURPOSE (Each of the seven items represents a distinct belief about the purpose of college)	NA	NA
GOALS FOR SPECIFIC COURSE OR MAJOR		
SCALES: GENERAL ACADEMIC ORIENTATION		
Develop creativity	7	.85
Increase self-understanding	8	.86
Improve speaking skills	3	.78
Improve reasoning skills	11	.89
Develop a life philosophy	6	.81
Understand the world around me	8	.85
Work for social causes	7	.88
Develop scientific inquiry skills	5	.89
Prepare for a career	9	.91
Gain expertise	7	.84
Develop human relations	9	.89
Improve numerical ability	3	.92
Understand cultural diversity	5	.84
Value learning for its own sake	4	.69
Improve basic skills	4	.82
SCALES: SUBJECT-SPECIFIC GOALS		
English	15	.89
History	13	.90
Sociology	15	.89
Psychology	10	.86
Biology	11	.88
Mathematics	7	.85
Fine arts	12	.90
Romance languages	11	.86
Introductory business	13	.85
Universally endorsed	11	.85

Table 4 (continued)

Title of Section	Items	Consistency
FEELINGS ABOUT STUDYING (Optional in CR versions)		
SCALES:		
Goal time frame (long-range)	6	.75
Goal time frame (short-range)	3	.57
Goal clarity	3	.42
Goal source (expectations)	3	.59
Goal source (self)	3	.33
EXPECTATIONS AND STUDY SKILLS (Optional in CR versions)		
SCALES:		
Self-confident scholar	11	.81
Anxious student	7	.72
TYPES OF ACTIVITIES SCALES (Post-test versions only)		
SCALES:		
Relates and applies coursework	5	.79
Interacts about coursework	4	.72
Explores beyond assignments	4	.70
Concentrates on task	2	.71
VII. PREFERENCES FOR COURSE ORGANIZATION (Major field only)		
(Each of the seven items represents a distinct preference for course sequencing)	NA	NA

7. Scale Items and Interpretation

Results from two years of developmental work and two years of pilot study provide considerable evidence about the scales that we have derived from the SGE. Except as noted, we have been able to construct indices that have high internal consistency and seem to describe the dimensions of students' goals in college and selected courses rather well.

In this section we explain briefly the meaning of each of the SGE scales listed in Table 4. The actual items included on each scale are given in accompanying Tables 5-43.

Goals in Attending College

The first survey section poses 19 goals for attending college and asks students to indicate (on a scale of 1 = not important to 4 = essential) how important each is to them personally. In addition, for the IR versions, students are asked to supply their perceptions of the importance of these goals to their teachers. Our purposes here are to provide the academic leader or researcher with a multidimensional profile of the students' college goals and a rough measure of the congruence students perceive between their goals and the goals they believe their teachers have for them. It is not presumed that students will perceive their teachers' expectations accurately. Rather, it is important to recognize that perceptions of similarities or differences help determine the ways in which students approach a course. (For the Classroom Research Set we have omitted the students' perception of their teachers' goals, preferring that the instructor engage students in discussion of differences.)

In both IR and CR sets, users can add up to six college goals of their own choice to the list of 19.

From students' responses to the 19 items about their college goals, the three scales described below consistently emerge; the relevant items are listed in Tables 5-7. Students may strongly endorse more than one purpose. The pattern of student responses comprises the shaded box in Figure 1 labeled "college goal patterns."

College-Level Goal Scales

- *Prepare for Career and Graduate/Professional School:* Consists of six items that describe a career orientation. A concern for a better job, high income, and material comfort is evident. Students who endorse this scale strongly may choose to pursue these goals through employment immediately after graduation or they may enroll in graduate or professional school as a means to achieve their career goals.

- *Acquire General Education:* Reflects an interest in the intellectual offerings typical of traditional higher education. The nine items that make up the scale describe a desire for cultural knowledge and an interest in understanding the nature of an academic field.

- *Non-directed Scale:* Comprises four items that reveal no definite intellectual or career motivation for pursuing a college education. External motivations, friends, or other social reasons, are cited as reasons for attending college.

Table 5

Goals for Attending College Scales

SCALE: Prepare for Career and Graduate/Professional School
ALPHA RELIABILITY: .69

Consists of items that describe a career orientation. A concern for a better job, high income, and material comfort is evident. Students who endorse this scale strongly, may choose to pursue these goals through employment immediately after graduation, or they may enroll in graduate or professional school as a means to achieve their career goals.

Item Number	Item
1	To get a better job after college
3	To gain respect as an expert at something
9	To be able to make more money
10	To be able to have a successful career
13	To prepare for graduate or professional school
19	To improve one's social position

Table 6

Goals for Attending College Scales

SCALE: Acquire General Education
ALPHA RELIABILITY: .83

Reflects an interest in the intellectual offerings typical of traditional higher education. The nine items that make up the scale describe a desire for cultural knowledge and an interest in understanding the nature of an academic field.

Item Number	Item
2	To gain a general education
4	To improve study skills and reading habits
5	To prepare for a life of meaningful participation in society
7	To become a more cultured person
11	To understand how knowledge is developed
12	To learn more about interesting things
16	To become an informed citizen and voter
17	To develop creative talents
18	To prepare for a life of service to society

Table 7

Goals for Attending College Scales

SCALE: Non-Directed Scale
ALPHA RELIABILITY: .69

Comprises items that reveal no definite intellectual or career motivation for pursuing a college education. External motivations, friends, or other social reasons, are cited as reasons for attending college.

Item Number	Item
6	To get away from home
8	To provide something to do
14	To meet family expectations
15	To be with friends

A second section of the survey seeks student response to several statements describing broad purposes of attending college. Attempting to portray patterns of goals for attending college in a somewhat different way, these responses represent seven distinct orientations. In order of their appearance in the SGE, we use the following short-hand labels for these orientations or purposes: (1) social change; (2) effective thinking; (3) systematic instruction; (4) vocational orientation; (5) personal enrichment; (6) great ideas; (7) values clarification.

There are no right or wrong orientations toward college and students may strongly endorse more than one of these purposes. We have compared responses of introductory students and upper-class majors with an existing data bank of responses from a nationally representative sample of faculty members teaching these same courses. This comparison shows that students in all fields place more emphasis on the vocational purposes of college than do faculty members, but they do not necessarily endorse the other purposes less strongly as a result.

Goals in Taking This Course

In this section, the heart of the SGE, students keep a particular introductory course in mind as they answer (on a scale of 1 = not important to 4 = essential) whether each statement is a course goal for them. The list contains 110 possible course goals, most of which focus on aspects of academic or intellectual development. Users may add course goals of local interest.

Two sets of scales, giving different portraits of students' course goals and, hence, useful for different purposes, have been derived from these 110 goal items. We have called the two sets the Subject-Specific Goal Scales and the General Academic Orientation Scales. The General Academic Orientation Scales seem to have greatest promise as a multi-dimensional representation of the fuzzy box labeled "Course Goal Patterns" in Figure 1. The Subject-Specific Scales are more useful in comparing faculty and student goals for the same course.

Subject-Specific Goal Scales

The nine subject-specific scales contain items that characterize the goals of students majoring in a field, or those taking an introductory course in that field, or both. That is, we formed these scales by selecting items that students studying (or majoring in) a particular subject consistently endorsed more strongly than did students studying another subject. (See Appendix 2 for profiles that illustrate these differences.) Since we only included specific fields in the pilot tests, the number of these scales is limited. We encourage faculty members to develop others appropriate to their courses.

Because students (and faculty) in related disciplines often share common goals, some items are included in more than one scale. As a result, some scales are moderately positively correlated. For example, students studying sociology and psychology share some goals. In contrast, the subject-specific scales for students studying in sociology and mathematics courses have no items in common. A tenth scale, which we call the "strongly endorsed scale," includes a few goal items strongly endorsed by students regardless of the course in which they were enrolled. While there were many such goal statements in earlier versions of the SGE, we retained only a few to serve as a check on response patterns. The lists of items on each scale are shown in Tables 8-17.

Table 8

Subject-Specific Goals in Taking This Course

SCALE: Typically Endorsed by Students in English Courses
ALPHA RELIABILITY: .89

Item Number	Item
6	To improve my study skills
14	To become aware of different philosophies, cultures, and ways of life
19	To learn to organize my thoughts
24	To develop respect for and sensitivity to the views of others
25	To improve my writing abilities -- to develop clear, correct, and effective communication
29	To learn how things change over time
33	To find problems and solutions in literature and film that apply to my own life
62	To improve my reading skills
65	To develop my creative talents
83	To increase my power to persuade others
84	To improve my speaking abilities
85	To learn how to use library facilities and other information sources
91	To understand my own abilities and limitations
102	To be able to write an excellent technical report
107	To overcome hesitancy about expressing my views in public

Table 9

Subject-Specific Goals in Taking This Course

SCALE: Typically Endorsed by Students in History Courses
ALPHA RELIABILITY: .90

Item Number	Item
14	To become aware of different philosophies, cultures, and ways of life.
18	To develop a broader vision of the world
28	To understand events that people have tried to explain
29	To learn how things change over time
37	To understand the world around me
53	To understand the complexity of the world
60	To gain a global or international perspective
68	To help secure world peace
69	To understand the causes of war and peace
72	To learn how people have solved social problems
75	To develop leisure time interests
96	To understand how culture has developed
98	To learn how people govern themselves

Table 10

Subject-Specific Goals in Taking This Course

SCALE: Typically Endorsed by Students in Sociology Courses
ALPHA RELIABILITY: .89

Item Number	Item
14	To become aware of different philosophies, cultures, and ways of life
15	To learn appropriate social skills for different situations
18	To develop a broader vision of the world
24	To develop respect for and sensitivity to the views of others
27	To develop a philosophy of life
29	To learn how things change over time
36	To weigh and question the opinions of experts and authorities
38	To be able to make ethical and moral choices
48	To learn how to work for important causes
52	To interpret evidence
67	To develop closer relationships with others
68	To help secure world peace
72	To learn how people have solved social problems
76	To help improve gender and racial equality
80	To contribute to the improvement of humar welfare

Table 11

Subject-Specific Goals in Taking This Course

SCALE: Typically Endorsed by Students in Psychology Courses
ALPHA RELIABILITY: .86

Item Number	Item
18	To develop a broader vision of the world
24	To develop respect for and sensitivity to the views of others
38	To be able to make ethical and moral choices
67	To develop closer relationships with others
71	To understand scientific principles and concepts
72	To learn how people have solved social problems
80	To contribute to the improvement of human welfare
86	To improve my ability to handle stress
89	To establish standards of behavior
100	To develop a personal philosophy related to my work

Table 12

Subject-Specific Goals in Taking This Course

SCALE: Typically Endorsed by Students in Biology Courses
ALPHA RELIABILITY: .88

Item Number	Item
29	To learn how things change over time
38	To be able to make ethical and moral choices
48	To learn how to work for important causes
70	To try to answer unsolved questions
71	To understand scientific principles and concepts
88	To investigate the unknown
90	To become aware of the consequences of new applications in science and technology
92	To develop keener awareness of my environment
97	To learn more about science
101	To understand how science has affected human life
103	To identify an appropriate career

Table 13

Subject-Specific Goals in Taking This Course

SCALE: Typically Endorsed by Students in Mathematics Courses
ALPHA RELIABILITY: .85

Item Number	Item
59	To learn to solve problems
63	To improve my skills in communicating by electronic means such as computers
71	To understand scientific principles and concepts
78	To learn to interpret numerical data
90	To become aware of the consequences of new applications in science and technology
104	To improve my mathematical skills
109	To improve my self-confidence in mathematics

Table 14

Subject-Specific Goals in Taking This Course

SCALE: Typically Endorsed by Students in Fine Arts Courses
ALPHA RELIABILITY: .90

Item Number	Item
13	To develop friendships and loyalties of lasting value
24	To develop respect for and sensitivity to the views of others
42	To use my imagination
65	To develop my creative talents
66	To enjoy works of art
67	To develop closer relationships with others
73	To have fun
75	To develop leisure time interests
77	To enjoy film
79	To create a composition, artistic work, or invention that no one has ever created before
99	To become a happy person
110	To enjoy music

Table 15

Subject-Specific Goals in Taking This Course

SCALE: Typically Endorsed by Students in Romance Language Courses
ALPHA RELIABILITY: .86

Item Number	Item
14	To become aware of different philosophies, cultures, and ways of life
15	To learn appropriate social skills
18	To develop a broader vision of the world
48	To learn to work for important causes
60	To gain a global or international perspective
72	To learn how people have solved social problems
75	To develop leisure time interests
80	To contribute to the improvement of human welfare
82	To promote international harmony
84	To improve my speaking abilities
96	To understand how culture has developed

Table 16

Subject-Specific Goals in Taking This Course

SCALE: Typically Endorsed by Students in Introductory Business Courses
ALPHA RELIABILITY: .89

Item Number	Item
4	To weigh alternatives when making decisions
8	To recognize broad principles when observing specific events
45	To understand current issues in this field
63	To improve my skills in communicating by electronic means such as computers
64	To become a knowledgeable consumer
74	To achieve job security
81	To establish important contacts for the future
83	To increase my power to persuade others
84	To improve my speaking abilities
93	To succeed in business
94	To develop my leadership abilities
103	To identify an appropriate career
105	To learn how to acquire power

Table 17

Subject-Specific Goals in Taking This Course

SCALE: Strongly Endorsed by Students in Most Courses
ALPHA RELIABILITY: .85

Item Number	Item
1	To build a record of achievement of which I can be proud
3	To enjoy learning for learning's sake
5	To see how different facts and ideas fit together
46	To understand specific facts in this field
47	To learn things that will stimulate me to learn more on my own
51	To gain information that will be useful after college in my family life
55	To be able to perform credibly in my chosen occupation
56	To learn to accept challenges
58	To gain information directly useful in my current or future career
61	To use the skills and abilities I have more effectively
87	To eventually become an expert in my chosen field

The Subject-Specific Scales will be most useful to classroom instructors or academic department chairpersons who are interested in examining the strength of student goals on the scale characteristic of their field, and perhaps some related scales or items they believe to be important. Since there are no right and wrong answers and no norms for the SGE, instructors may modify the scales we tentatively provide for their field. Instructors in fields that have not been included in the pilot testing may add items typical for their field and may discover which items in the current list are strongly endorsed by their students. They should also complete the parallel Faculty Perspectives Version to see which items they, as instructors, choose. Gradually, as the number of users expands, we will be able to add new scales that typify students in other introductory courses and majors.

General Academic Orientation Scales

We have also derived from the 110 course-level goals a set of 15 scales indicating the broad, general types of learning goals that students seem to bring to courses. These scales reflect the underlying patterns of association among these goals for students included in the introductory courses and majors used in the pilot studies. A student may espouse 15 separate orientations toward a specific course. Thus, in combination, these 15 scales present a multidimensional picture of students' goals for a course that we have labeled a "course goal pattern" in Figure 1. But the 15-scale profiles will be different for different courses. This is much more information than is provided in most goal profiles, which frequently focus on such simple dichotomies such as career orientation versus intrinsic desire for learning. However, care must be taken to remember that the profile applies only to the course for which a student is responding. The items on each scale are shown in Tables 18-32.

The General Academic Orientation scales will be useful to campus leaders and researchers who wish to describe students' orientations toward different disciplines in introductory courses and to examine how these orientations change over time. They may also prove useful in identifying groups of students taking an introductory course who have goals that are narrower than the instructor views as desirable.

The 15 General Academic Orientation scales are listed below. They are arranged in order beginning with the goal that varied most by discipline in our pilot tests (Develop creativity) and ending with the goal which was quite common in all disciplines (Improve basic skills.)

- *Develop creativity:* Taps students' desire to cultivate their aesthetic, artistic, and leisure interests.

- *Increase self-understanding:* Made up of goal items that reflect an interest in self-awareness. A desire to develop personal independence, self-worth, and an understanding of the student's abilities and limitations, are cited as reasons for taking a specific course.

- *Improve speaking skills:* Reflects a desire to develop confidence and expertise when communicating orally with either a group of people or an individual.

- *Improve reasoning skills:* Reflects a wish to develop a general ability to analyze, synthesize and organize knowledge.

- *Develop life philosophy:* Represents students' desire to develop a set of principles that will guide them through life.

- *Understand the world around me:* Endorsed by students who wish to understand the world from several different perspectives. The items included in this scale reflect concerns with biological, societal, and economic world issues.

- *Work for social causes:* Denotes both an interest in world issues and a desire to work for the improvement of world society.

- *Develop scientific inquiry skills:* Reflects a desire to understand the structure of knowledge in the sciences and the effects of scientific inquiry on the world.

- *Prepare for career:* Comprises items that reflect students' desire to apply their coursework to their current or eventual career or future position in society.

- *Gain expertise:* Implies student concern with mastering a specific body of knowledge in their course or field.

- *Develop human relations skills:* Delineates a desire to develop the skills needed for meaningful personal associations.

- *Improve numerical ability:* Indicates a concern with acquiring basic skills in mathematics.

- *Understand cultural diversity:* Reflects an interest in comparing the similarities and differences of various cultures.

- *Value learning for its own sake:* Represents a general interest in the intellectual offerings of a specific course or field.

- *Improve basic skills:* Indicates a concern for developing the skills necessary to succeed in college. Items denote a desire to improve reading, writing, and library skills.

Feelings About Studying in This Course
(Optional in CR versions where privacy may be a concern.)

The 18 items in this section were intended to assess several attributes of goals discussed in psychological literature but often ignored in educational research. These attributes include goal difficulty, goal time frame (long-range or short-term), goal clarity, and goal source (self or assigned by external source). Despite several trials, we have not been totally successful in developing unidimensional and reliable scales that tap all of these attributes the five current scales (shown in more detail in Tables 33-37) are:

- *Goal time frame (long-range):* Includes items that describe an intrinsic enjoyment of studying and learning in the course (or field) in question. A sense of satisfaction accompanies the studying process for students who endorse this scale.

- *Goal time frame (short-range):* Indicates a preference for short-term learning assignments of only moderate difficulty

- *Goal clarity:* Implies a preference for clear assignments and purposes.

- *Goal source (expectations):* Contains items that tap students' external motivation for completing study tasks.

- *Goal source (self):* Student believes he or she should set own goals in college and courses rather than accept goals originating with others.

Table 18

General Academic Orientation Scales

SCALE: Develop Creativity
ALPHA RELIABILITY: .85

Taps students' desire to cultivate their aesthetic, artistic and leisure interests.

Item Number	Item
65	To develop my creative talents
66	To enjoy works of art
73	To have fun
75	To develop leisure time interests
79	To create a composition, artistic work, or invention that no one has ever created before
77	To enjoy film
110	To enjoy music

Table 19

General Academic Orientation Scales

SCALE: Increase Self-Understanding
ALPHA RELIABILITY: .86

Made up of goal items that reflect an interest in self-awareness. A desire to develop personal independence, self-worth, and an understanding of the student's abilities and limitations, are cited as reasons for taking a specific course.

Item Number	Item
20	To develop personal independence
21	To learn skills that enrich my daily life
33	To find problems and solutions in literature and film that apply to my own life
41	To increase my self-confidence or sense of self-worth
42	To use my imagination
91	To understand my own abilities and limitations
99	To become a happy person
108	To understand my own interests

Table 20

General Academic Orientation Scales

SCALE: Improve Speaking Skills
ALPHA RELIABILITY: .78

Reflects a desire to develop confidence and expertise when communicating orally with either a group of people or an individual.

Item Number	Item
83	To increase my power to persuade others
84	To improve my speaking abilities
107	To overcome hesitancy about expressing my views in public

Table 21

General Academic Orientation Scales

SCALE: Improve Reasoning Skills
ALPHA RELIABILITY: .89

Reflects a wish to develop a general ability to analyze, synthesize and organize knowledge.

Item Number	Item
4	To weigh alternatives when making decisions
10	To improve my reasoning ability- to recognize assumptions, make logical inferences, and reach correct conclusions
11	To understand how scholars gain new knowledge or understanding
30	To develop the ability to see relationships, similarities, and differences among ideas.
31	To draw my own conclusions
32	To appreciate individuality and independence of thought and action
36	To weigh and question the opinions of experts and authorities
39	To predict specific events from broad principles
47	To learn things that will stimulate me to learn more on my own
49	To make effective decisions
52	To interpret evidence

Table 22

General Academic Orientation Scales

SCALE: Develop Life Philosophy
ALPHA RELIABILITY: .81

Represents students' desire to develop a set of principles that will guide them through life.

Item Number	Item
23	To develop the capacity to change as times change
27	To develop a philosophy of life
35	To become more broad-minded
38	To be able to make ethical and moral choices
43	To develop a capacity for self-evaluation
100	To develop a personal philosophy related to my work

Table 23

General Academic Orientation Scales

SCALE: Understand the World Around Me
ALPHA RELIABILITY: .85

Endorsed by students who wish to understand the world from several different perspectives. The items included in this scale reflect concerns with biological, societal, and economic world issues.

Item Number	Item
26	To become better informed as a citizen
28	To understand events that people have tried to explain
29	To learn how things change over time
34	To understand how humans have learned to cope with nature
37	To understand the world around me
48	To learn how to work for important causes
50	To be able to debate both sides of an issue effectively
53	To understand the complexity of the world

Table 24

General Academic Orientation Scales

SCALE: Work for Social Causes
ALPHA RELIABILITY: .88

Denotes both an interest in world issues and a desire to work for the improvement of world society.

Item Number	Item
68	To help secure world peace
69	To understand the causes of war and peace
72	To learn how people have solved social problems
76	To help improve gender and racial equality
80	To contribute to the improvement of human welfare
82	To promote international harmony
92	To develop keener awareness of my environment

Table 25

General Academic Orientation Scales

SCALE: Develop Scientific Inquiry Skills
ALPHA RELIABILITY: .89

Reflects a desire to understand the structure of knowledge in the sciences and the effects of scientific inquiry on the world.

Item Number	Item
70	To try to answer unsolved questions
71	To understand scientific principles and concepts
90	To become aware of the consequences of new application in science and technology
97	To learn more about science
101	To understand how science has affected human life

Table 26

General Academic Orientation Scales

SCALE: Prepare for Career
ALPHA RELIABILITY: .91

Comprised of items that reflect students' desire to apply their coursework to their current or eventual career or future position in society.

Item Number	Item
54	To achieve social status or prestige
63	To improve my skills in communicating by electronic means such as computers
64	To become a knowledgeable consumer
74	To achieve job security
81	To establish important contacts for the future
93	To succeed in business
94	To develop my leadership abilities
95	To acquire greater decision-making responsibility in my job
105	To learn how to acquire power

Table 27

General Academic Orientation Scales

SCALE: Gain Expertise
ALPHA RELIABILITY: .84

Implies student concern with mastering a specific body of knowledge in their course or field.

Item Number	Item
45	To understand current issues in this field
46	To understand specific facts in this field
51	To gain information that will be useful after college in my family life
55	To be able to perform credibly in my chosen occupation
58	To gain information directly useful in my current or future career
61	To use the skills and abilities I have more effectively
87	To eventually become an expert in my chosen field

Table 28

General Academic Orientation Scales

SCALE: Develop Human Relations Skills
ALPHA RELIABILITY: .89

Delineates a desire to develop the skills needed for meaningful personal associations.

Item Number	Item
7	To learn to get along with different kinds of people
12	To prepare for a life of service to others
13	To develop friendships and loyalties of lasting value
15	To learn appropriate social skills for different occasions
16	To develop the ability to work well with others in a group
22	To listen effectively to what others are saying
24	To develop respect for and sensitivity to the views of others
44	To help others who need my skills or services
67	To develop closer relationships with others

Table 29

General Academic Orientation Scales

SCALE: Improve Numerical Ability
ALPHA RELIABILITY: .92

Indicates a concern with acquiring basic skills in mathematics.

Item Number	Item
78	To learn to interpret numerical data
104	To improve my mathematical skills
109	To improve my self-confidence in mathematics

Table 30

General Academic Orientation Scales

SCALE: Understand Cultural Diversity
ALPHA RELIABILITY: .84

Reflects an interest in comparing the similarities and differences of various cultures.

Item Number	Item
14	To become aware of different philosophies, cultures, and ways of life.
18	To develop a broader vision of the world
60	To gain a global or international perspective
96	To understand how culture has developed
98	To learn how people govern themselves

Table 31

General Academic Orientation Scales

SCALE: Value Learning For Its Own Sake
ALPHA RELIABILITY: .69

Represents a general interest in the intellectual offerings of a specific course or field.

Item Number	Item
2	To discover new ways of seeing and doing things
3	To enjoy learning for learning's sake
5	To see how different facts and ideas fit together
106	To explore the world of ideas

Table 32

General Academic Orientation Scales

SCALE: Improve Basic Skills
ALPHA RELIABILITY: .82

Indicates a concern for developing the skills necessary to succeed in college. Items denote a desire to improve reading, writing, and library skills.

Item Number	Item
25	To develop my writing abilities- to develop clear, correct and effective communication
62	To improve my reading skills
85	To learn how to use library facilities and other informational sources
102	To be able to write an excellent technical report

Table 33

Feelings About Studying in This Course

SCALE: Goal Time Frame (long-range)
ALPHA RELIABILITY: .75

Includes items that describe an intrinsic enjoyment of studying and learning in the course (or field) in question. A sense of satisfaction accompanies the studying process for students who endorse this scale.

Item Number	Item
1	In the long run, study in this field will help me to get ahead in the world
2	When I complete a learning activity I usually get a sense of satisfaction
3	In this course, setting long-range goals is important
4	I complete daily learning tasks primarily because I enjoy them
15	I find learning in this field is very exciting and challenging
16	I like to plan my learning activities over a long time frame so they will fit together

Table 34

Feelings About Studying in This Course

SCALE: Goal Time Frame (short-range)
ALPHA RELIABILITY: .57

Indicates a preference for short-term learning assignments of only moderate difficulty

Item Number	Item
9	I prefer to set short-range goals so that I can get a sense of satisfaction and achievement
11	I would rather tackle easy problems than difficult ones
14	If I sense I can't achieve a goal, I'd rather set one that is easier to reach

Table 35

Feelings About Studying in This Course

SCALE: Goal Clarity
ALPHA RELIABILITY: .42

Implies a preference to have clarity about assignments and the purposes they are expected to achieve.

Item Number	Item
7	I feel obliged to work hard only if I can see the importance of the task
8	I learn best when my instructor makes it clear what the goals of each assignment are
13	I learn best if I see a direct relation between my assignments and my long range goals

Table 36

Feelings About Studying in This Course

SCALE: Goal Source (Expectations)
ALPHA RELIABILITY: .59

Contains items that tap students' external motivation for completing study tasks.

Item Number	Item
5	I should complete what is expected of a person of my capability
6	I would work hard to get good grades even if I didn't like the coursework
12	Even when study materials are dull and uninteresting, I believe I should keep working until I am finished

Table 37

Feelings About Studying in This Course

SCALE: Goal Source (Self)
ALPHA RELIABILITY: .33

Student believes he or she should set own goals in college and courses rather than accept goals originating with others.

Item Number	Item
10	I believe I should set my own goals rather than accept someone else's goals for me
17	I seldom need to seek advice about what my goals should be
18	Deciding what topics I study should be my own choice rather than my instructor's choice

Expectations and Study Skills in This Course
(Optional in CR versions where privacy may be a concern.)

The items included in this section of the SGE were drawn from various pilot versions of NCRIPTAL's Motivated Strategies for Learning Questionnaire (Pintrich et al., 1989). The selected items were intended to assess students' self-confidence (or anxiety) about the target course, their expectations of success, their use of organizing learning strategies, their diligence when studying, and their desire to achieve independence in learning activities. Note that these and related ideas are included in our theoretical framework as outlined in Figure 1. We found two underlying scales: one includes both student confidence and types of study habits, and the other only confidence (lack of). We have called these the "Levels of Confidence" Scales (Tables 38-39). They seem to describe "self-efficacy" for this course, as well as learning strategies in use.

- *Self-Confident Scholar:* Includes items that tap students' confidence in their own ability to succeed in the course. The study habits students report using in this scale typically focus on integrating material, thus the term "scholar."

- *Anxious Student:* Endorsed strongly by students who report diligent study but seem to believe they have not yet mastered the art of being a successful student. A focus on the possibility of failure, rather than success, is linked with detail-oriented study habits.

Types of Activities Pursued in This Course

These 21 items, describing activities students report having pursued during the course (or major), are used only in post-test or major field versions (IR-2, IR-M, CR-2, CR-M) when students can legitimately report their recent class-related activities. The items are modeled on early items tested by C. Robert Pace as he developed the College Experience Questionnaire, now known informally as the "Quality of Effort" Scales (1975, 1987). Although Pace's measures of student effort refer to the entire college experience, we ask the students to report effort in a specific course. Used in this way, the activities reported will reflect course assignments and the nature of the field as well as student effort. In our theoretical framework, Figure 1, these scales are represented by the box labeled "Student Effort."

Four derived scales that group similar types of course activity are described below and the items on each are shown in Tables 40-43.

- *Relates and applies coursework:* This scale taps students' inclination to focus on integrating what is learned in a class (or major) with other courses or life situations. The scale also describes learning activities that focus on integration and concept-learning rather than memorization.

- *Interacts about coursework:* This scale is not always distinct for individual courses but it does describe activities pursued by students reporting about their major field. The types of activities it represents point to an integration of students' academic and social lives.

- *Explores beyond assignments:* This scale consists of items that describe intellectual activities extending beyond the assignments of a particular course or major. These activities portray students who have become excited about a particular field of study.

- *Concentrates on task:* This set of items describes study activities that continue for an extended period of time.

Preferences for Course Organization
(Major Versions IR-M and CR-M only)

These seven statements, based on the work of Posner and Strike (1976), describe students' preferences for how material taught in courses should be organized. They are not included in the framework in Figure 1. Rather, these items are experimental. We hope to gain some knowledge of how students' preferences emerge as they reach advanced stages in their education. Because of their complexity and the difficulty beginning students have in interpreting them, we have included them only in the surveys to be used with upper-class majors (Versions IR-M and CR-M). For faculty, we have found that particular modes of course organization are linked to views of the discipline and beliefs about the purpose of education. We have little information as yet about how students respond to these statements but we presume that students majoring in a field may become socialized to think like the faculty teaching in that field.

Student Information

In addition to standard demographic information, this part of the SGE seeks information about students' educational and career aspirations, perceptions of their preparedness for college, certainty about educational and career goals, and satisfaction with college. These items may be used to estimate "college expectancy," "course expectancy," and self-assessment of preparation as shown in Figure 1. As noted earlier, for the Classroom Research versions, some personal questions are in an optional section. The extent to which these items are used will depend largely on the purposes the user has in mind and the extent to which it makes sense to examine responses of subgroups of students.

Addition of Local Items and Using the Item Pool

The SGE was constructed from an extensive pool of items gathered from many sources. During development, most items that were answered in a uniformly positive or a uniformly negative way by most students were discarded, since they provided little information helpful to teachers or researchers in understanding course goals of different groups of students. The retained items were those that best differentiated among students taking very different types of courses and majors. As a consequence, the SGE does not include all the reasons why students may be taking a course, or all the reasons their teachers might hope they would hold.

In addition, originally, many items referring to personal and social goals of students were included in the SGE. Students who were asked about goals they hoped to achieve in a given course, however, seldom saw these personal and social goals as relevant. Therefore, the goal items retained in the SGE are mostly of the type one would call academic, intellectual or vocational. For these reasons, we encourage faculty members or researchers to add suitable local items, possibly drawing as well from the pool of items we decided not to include, which is in Appendix 3.

Table 38

Expectations and Study Skills in This Course

SCALE: Self-Confident Scholar
ALPHA RELIABILITY: .81

Includes items that tap students' confidence in their own ability to succeed in the course. The study habits students report using in this scale typically focus on integrating material, thus the term "scholar".

Item Number	Item
5	When I study new material, I often skim it to see how it is organized
6	When I study for exams I integrate information from different sources, such as lectures, reading, and discussions
7	When reading I try to relate the material to what I already know
8	I begin with course material but develop my own ideas about the topics
9	I believe I will receive an excellent grade
10	When I study a topic, I try to make everything fit together
11	I am confident that I can learn the basic concepts
12	I'm certain that my own ability will result in my being successful
13	When having difficulty recalling something, I make an effort to recall something else that might be related to it
15	I prefer learning activities that are challenging or arouse my curiosity even if they are difficult
18	If I want to get a good grade, it depends on what I do

Table 39

Expectations and Study Skills in This Course

SCALE: Anxious Student
ALPHA RELIABILITY: .72

Endorsed strongly by students who report diligent study but seem to believe they have not yet mastered the art of being a successful student. A focus on the possibility of failure, rather than success, is not related to integrative study strategies, but may focus more on details

Item Number	Item
1	When I take tests I think of the consequences of failing
2	I have difficulty identifying the most important points in my reading
3	I seldom ask my instructor to clarify concepts that I don't understand well
4	When I take a test I think about items on other parts of the test I can't answer
14	I often find that I read assignments but don't know what they are all about
16	It is sometimes hard for me to go on with my work if I am not encouraged
17	When coursework is difficult, I either give up or study only the easy parts

Table 40

Types of Activities Pursued in This Course

SCALE: Relates and Applies Coursework
ALPHA RELIABILITY: .79

This scale taps students' inclination to focus on integrating what is learned in a class (or major) with other courses or life situations. The scale also describes learning activities that focus on integration and concept-learning rather than memorization.

Item Number	Item
4	I thought about applications of the material to other situations
7	I looked for some basic organization in course materials
14	I tried to see how different facts and ideas fit together
20	I tried to relate the material to ideas and experiences of my own
22	I related what I learned in this field to my other courses

Table 41

Types of Activities Pursued in This Course

SCALE: Interacts About Coursework
ALPHA RELIABILITY: .72

This scale is not always distinct for courses but it is so for students reporting about their major field. The types of activities it represents point to an integration of students' academic and social lives.

Item Number	Item
5	I discussed the subject matter of this field with other students for an hour or longer
11	I told friends about the interesting materials or ideas in this field
16	I helped another student with coursework
17	I recommended this field to other students

Table 42

Types of Activities Pursued in This Course

SCALE: Explores Beyond Assignments
ALPHA RELIABILITY: .70

This scale consists of items that describe intellectual activities extending beyond the assignments of a particular course or major. These activities portray students who have become excited about a particular field of study.

Item Number	Item
1	I read a book related to this field that was not an assigned reading
10	I participated in a research project related to this field
15	I read newspaper items related to coursework
19	I spent five hours or more looking up references in the library and taking notes related to coursework

Table 43

Types of Activities Pursued in This Course

SCALE: Concentrates On Task
ALPHA RELIABILITY: .71

Describes study activities that continue for an extended period of time.

Item Number	Item
6	I spent a concentrated period of time--three hours or longer without interruption--studying in this field
13	I studied at least four hours or longer on coursework during the weekend

SECTION II. USING THE SGE FOR INSTITUTIONAL RESEARCH

1. Uses in Institutional Research

This section of the User's Guide is written for institutional researchers or academic administrators who are responsible for educational studies at a broader level than the individual classroom. For example, the information provided by the Student Goals Exploration can be used to understand and compare students' goals in various courses and majors. Academic planners may use this information to suggest curriculum changes, faculty development needs, or other policy revisions. Although the suggestions in this section also apply to other forms of educational research, for convenience we call all of these varied users "institutional" researchers.

Here we describe several program and college level uses of the SGE, suggest ways to administer it for these purposes, and provide computer scoring procedures to assist in analyzing data. Not all possible uses are suggested here; individual researchers members undoubtedly will find other questions to explore depending on their local needs.

Those who use the SGE for institutional research should have some experience in administering and analyzing surveys. They should read Section 3 to understand more about how the SGE was developed, study the wide range of its assessment uses, and learn about the technical properties of its scales.

2. Institutional Research Versions of the SGE

There are three versions of the SGE within the Institutional Research Set:

Institutional Research-1 [Beginning of Course (IR-1) Version]. This version examines goals that students bring to their college courses. It also assesses related motivational constructs such as levels of confidence, study skills and perceptions of preparation that were discussed earlier in this manual (See Figure 1, Section 1). SGE-IR-1 should be administered during the first week or two of courses when enrollment has stabilized. Originally designed for introductory courses, the IR-1 can also be used for intermediate courses. However, researchers using the SGE in intermediate courses may wish to work with faculty members in those fields to add some goal items specific to the field. (See page 46 for more information.)

Institutional Research-2 [End of Course (IR-2) Version]. This version examines students' goals as they complete college courses. When used in tandem with Version IR-1, changes in magnitude and direction of goals during a term may be examined. Research on the freshman year suggests that students may experience much goal change during the first semester or year of study. Also, several measures (initial goals, levels of confidence, background variables) may be related to the types of activities students report pursuing in a course. SGE-IR-2 should be used close to the end of the term but before students are preoccupied with preparing for examinations.

Major Field (IR-M) Version. This version examines goals that students hope to achieve in their chosen major. When used in conjunction with the IR-1 version, it can help explore changes in magnitude and direction of goals for the same discipline over time in college. Faculty in particular departments may wish to add specific items.

Faculty Perspective Version. This separate listing of possible course goals makes it convenient for faculty members to record their own course goals and compare them with those of students.

3. Examples of SGE Uses

Researchers can use the SGE for varied purposes. Some of the uses we discuss below are similar to those we suggested in the Guide for Classroom Research. It is important, therefore, to understand the advantages and disadvantages of using the IR versions and of having the studies conducted by an institutional or educational research office. The advantages include:

1. Researchers can work with a group of faculty members to randomly sample students from their classes and synthesize results.

2. The IR version of the SGE allows study of a larger set of dimensions, since all sections of the SGE are to be administered.

3. The researcher's distance from the students and neutrality may provide more assurance of anonymity for the students. Thus, students may be more open in their responses.

4. Researchers may have more regular access to keypunching and scoring facilities.

5. Researchers are accustomed to linking data with other appropriate variables in institutional data bases and inserting cautionary flags.

6. Institutional researchers are more likely to have the resources and staff continuity needed to conduct longitudinal studies.

Some disadvantages of using the IR version of the SGE are that:

1. The initiative for understanding student goals and using the information to improve teaching no longer rests with the individual instructor.

2. The turn around time for feedback may increase.

3. The study purposes are less likely to result in direct communication with students.

4. Instructors may see the researcher's work as an intrusion in her/his domain.

Since student responses to the SGE focus on a specific field, the data analyses must be done separately by field. Thus, most of the studies that the institutional researcher conducts will assist a specific department or group of faculty in the same discipline. Analyses for the various disciplines may, however, produce comparisons that provoke fruitful discussion among faculty in different fields.

Below we discuss a few uses of the SGE-IR briefly, beginning with the simplest, and indicate the appropriate SGE Version(s) to use.

1. *Purpose:* To help course instructors compare the course goals of students enrolled in various courses or sections of courses.

   Version: SGE-IR-1

Discussion: Faculty members in a program frequently would like to know whether students in different sections of a multi-section course have different goals. This may be especially important when sections are scheduled to serve students in different major programs, e.g., nursing, education, business. In another case, faculty members may wish to know how course goals differ among students who choose sections of a course that focus on different topics, for example, sections of English courses where students can choose to study poetry, the short story, or the novel. And, faculty members in a program may be interested in seeing whether goals of students in intermediate and advanced courses differ from goals of students in introductory courses. In each of these cases, an institutional researcher may be in a good position to help faculty members by administering the SGE-IR-1 in multiple courses or sections. Administering the SGE-IR early in the term will help faculty members identify the goals that students have for the courses, and the goals they don't have that the faculty consider desirable.

By aggregating data across multiple sections of the same course, the researcher can obtain sufficiently large samples to systematically compare student sub-groups based on characteristics students report in the SGE Student Information section. For example: Do the course goals of students who feel they were well prepared for the course differ from those who view their preparation as weak? Do the goals of older students differ from younger students? Of minority students from majority students? What about those who feel certain of their future career path compared with those who are uncertain? How about those students taking a required course who plan to major in a very different field? Do students who have had previous work in the same subject have different goals from those who are new to the field?

---

2. *Purpose:* To provide a basis for faculty discussion of the congruence between goals of students and faculty within an academic department.

   Version: SGE-IR-1; Faculty Perspective Version

   Discussion: Psychologists, educational researchers and experienced college teachers agree that students learn better if the instructor's goals and expectations are communicated to them clearly. They also learn better in settings where their own views are valued. This is true not only at the course level but at the program level. The department atmosphere can be improved if communication about goals flows from students to faculty as well as from faculty to students. An institutional researcher can help collect goals data from both students and faculty and present it in such a way that it fosters productive discussion.

---

3. *Purpose:* To examine how students' goals change as they advance through their studies.

   Version:
   - SGE-IR-1 and SGE-IR-2 to compare student responses at beginning and end of courses
   - SGE-IR-1 and SGE-IR-M to compare introductory course students with those who later decide to major in the field
   - SGE-IR-M (time 1) and SGE-IR-M (time 2) for tracking the goal changes of majors in the field

Discussion: Since most faculty members hope that students will have greater interest in and appreciation of their discipline, they view goal changes as desirable educational outcomes for students. By administering the SGE to the same students at two points in time, institutional researchers can help instructors determine whether the direction and magnitude of goal change for the group are consistent with program objectives. Of course, care must be taken to compare the same students over time. The researcher who can take responsibility for selecting appropriate random samples of students to study, dealing with attrition from the group, and using various ways of treating change scores may be able to arrive at firmer conclusions and better interpretations with smaller samples than can faculty members working independently.

---

4. *Purpose:* To compare the goals of successive cohorts of students.

Version: SGE-IR-1, SGE-IR-2 or SGE-IR-M

Discussion: Institutional researchers can develop goal profiles for a major or for selected courses, maintain them in a data base, and help faculty to compare them annually to detect changes in students who are selecting the majors. Because the data can be linked with other information, the researcher can help to determine if changes in goal profiles are related to changes in other student characteristics.

---

5. *Purpose:* To consider possible adjustments in academic programs that may better recognize and fulfill the goals of current students.

Version: For introductory courses, SGE-IR-1 or SGE-IR-2. For majors, SGE-IR-M

Discussion: An institutional researcher may help an academic committee to compare a goal profile of student majors with a department's curriculum plan. For example, as students take increasingly advanced courses in the major, which of their goals do not seem to be addressed in the course sequence? Which attitudes toward study in the major field might become more positive if curriculum adjustments were made? Is there need for an orientation course to help students establish more effective goals for their upper-division work, or a capstone course to help them relate what they have learned to the next steps in their education or career? Such comparisons may reveal curricular gaps related to particular goals of students. In this case, the role of the institutional researcher is to collect representative data and help the academic committee understand their implications.

---

6. *Purpose:* To examine how student goal patterns affect achievement of educational outcomes.

Version: SGE-IR-1 or SGE-IR-M; Faculty Perspective Version

Discussion: Just as students who have a strong desire to take a course may evaluate the instructor more favorably, students who have course or major goals most similar to those of faculty in their department may exert more academic effort in academic tasks and thus may achieve more. Using the SGE, institutional researchers may compare the

achievement of groups of students whose goals are initially most like and unlike those expressed by the faculty. Other types of relationships measured by the SGE that may be related to achievement are students' self-reported level of confidence, their reported study skills, and the types of activities they report pursuing in a course.

Achievement as measured by department tests or senior achievement scores is not the only desirable student outcome that could be used as a success measure (dependent variable) here. Note, for example, that in Figure 1 we refer to students' goal attainment rather than academic achievement, which may or many not be the student's original goal. Other measures might include enjoyment of a field of study, facility with particular types of course assignments, awards won, and employment opportunities acquired.

---

7. *Purpose:* To assist faculty in basic research about student learning.

   Version: Any of the SGE versions.

   Discussion: Psychologists, educational psychologists and counselors may be interested in using the SGE to pursue basic research questions. As one example, scale scores on the measure of levels of confidence could be obtained for a group of students. The students could then receive help in improving their study skills. Do the improved study skills result in increases in one's level of confidence as a student? As mentioned earlier, Figure 1 illustrates several unverified relationships of potential interest.

---

8. *Purpose:* Faculty development.

   Version: Any version of the SGE.

   Discussion: According to some observers, the SGE has great potential as a faculty development device. If the goals of students who enroll in a course or major are fairly consistent each year, repeated administration of the SGE will have diminishing returns. But substantial changes in faculty thinking about student needs may occur following the first administration of the SGE. These gains will result from the discussions about student goals with students and discussions among faculty colleagues.

4. Selecting the Information to Be Collected

For most of the purposes we have suggested, the institutional researcher will want to use all sections of the SGE-IR. This will allow full consideration of what other items correlate with students' goals in a course, as shown in Figure 1, Section 1. The Student Information Section in the SGE-IR is very comprehensive, but, if needed, the researcher can add additional demographic questions for appropriate subgroup comparisons. For example, the researcher may wish to compare the goals in science courses for freshmen students who were prepared in different types of secondary schools.

Student ID numbers typically will be collected by institutional researchers, particularly if longitudinal studies or linkages with existing data bases are planned. If any of the questions

are believed to invade student privacy, however, students can be instructed to omit them. Alternatively, though it limits future uses of the data base, researchers may wish to administer some parts of the SGE anonymously, without a student ID number. If only a longitudinal study using both SGE-IR-1 and SGE-IR-2 is planned, some specified type of six digit identification number known only to the student (for example, the month, day and year of birth) may be used to match the two versions. Do not suggest numbers such as house or phone numbers that change frequently for students.

Clearly, when selecting the type and amount of SGE information to collect, the researcher faces a tradeoff between response rate and identification so that the file may be linked with other relevant data. To achieve a high response rate, discuss with students why the SGE is being administered. A story in the campus newspaper describing how the SGE data will be used and the importance of student responses might also be helpful.

5. Adding Local Goal Items

Researchers planning to use the SGE-IR should first discuss it with the faculty members in whose courses or programs it will be administered, asking faculty members to identify those goals that are essential for their students to achieve, perhaps by completing the Faculty Perspective Version. Instructors should also specify any important goals for their students that are not on the SGE. Additional goal items can be distributed to students on a separate sheet. These goal items should be concise, concrete, include only one concept, and allow students to respond on the same scale provided for similar items in the SGE. Number them to correspond to the blank spaces provided for local items. Students should answer them on the extra answer sheet provided. Space is provided for adding six college goal items, 20 course or major items, and 15 student information questions.

In constructing the SGE, we tried to choose the clearest items among those with similar meanings, those important to both students and faculty members, and those that distinguished among goals for different disciplines. Items we decided not to use are in Appendix 3. Some program faculty may find it worthwhile to add these items if discussing them will help students understand the language of the discipline. To illustrate, the meaning of "problem-solving" and "critical thinking" may differ in different fields.

When deciding whether to add items, recall the following about the course goal items in the SGE:

- The goal items were pilot-tested primarily in introductory courses. For more advanced or specialized courses, faculty members may especially wish to add some items.

- Many laudable goals were not included in the SGE simply because everyone agrees they are laudable. A department may feel some goals are sufficiently important to want to get a sense of whether they are important to their students. If so, the items should be added.

- Many valued personal and social goals are not in the SGE because students did not view them as the goals for specific courses. When faculty members believe these goals are legitimate aims of the course or major, they should be added.

6. Selecting Student Samples and Administering the SGE

In general, an institutional researcher using the SGE will seek either responses from an entire population of interest, or decide to select a random sample. The entire population is appropriate if the researcher is helping faculty members study student goals in their own classes, or assisting a departmental group of faculty members in learning the goals of a relatively small group of majors. Random sampling will be chosen when the task is to provide a composite picture of students in a multi-section course or in a large group of majors. Random sampling may also be used when the objective is to compare goals of sub-groups of students within a large course or of those taking several different courses. In this case, randomly sampling a small number of students who are provided some incentive to complete the SGE-IR may produce a more accurate picture than sampling the entire population and getting a low response rate.

The way the sample is selected depends upon the study purpose; it is impossible to mention all the possibilities here. An illustration of one sampling method follows. If the purpose is to portray the goals of students in a large multi-section course, drawing the sample at random from the entire class roster will minimize instructor effects, unless systematic factors have segregated the students into sections on some non-random basis. If sections differ on some parameters (e.g., no students from a particular major are in some sections because of course conflicts; advisers often suggest students choose sections taught by particular instructors) then it would be better to stratify the sample by section, drawing randomly from each section.

The SGE-IR takes about 45 minutes for students to complete. There are a number of options for administration:

- With the cooperation of the instructors, the SGE can be administered during class time. We encourage this option since our experience shows that administration during class time, as an integral part of the course with explanation by the instructor produces the best response.

- With the cooperation of the instructors, the SGE can be distributed in class for students to complete and return to a central collection place within a day or two. This option works reasonably well if the central collection place is convenient and well-known. Alternatively, a "runner" can visit the class to introduce the SGE and, again, on several appointed days to collect it.

- The SGE can be mailed to randomly selected students who return sealed completed copies to a central collection place. Mail-out of the SGE from a central research office produces the lowest response rate. If mailed surveys are used, at least two postcard follow-ups should be planned. In case ID numbers or some other student identification are not used on the SGE itself, researchers should consider asking the students to submit a separate postcard or transmittal slip indicating that they have returned it. This notification can be detached from the SGE and will allow the researcher to concentrate on following up only those students who have not responded. If possible, it is always good to examine the characteristics of a set of non-respondents to see if they differ in any systematic way from those who responded. If the surveys are returned to a central place, it is also possible to mark the date and time they are returned to examine any differences between those who responded early and late.

As illustrated below, the exact timing of the SGE-IR will depend on the purpose.

Researchers may be interested in a "pure" measurement of students' goals prior to the study of a particular subject. In this case, the SGE could be administered during an orientation or registration period.

Researchers and instructors may be interested in the goals students hold for the course *after* instructors have discussed and illustrated the intended outcomes of the course during a few sessions. Giving the SGE-IR-1 after a week or so may help the instructor know how clearly the messages are being heard.

When using the IR-2 as a post-test, we suggest that students complete it near the end of the regular semester, but before end-of-term course obligations are due.

Students majoring in a field may complete the SGE-IR-M at anytime. For longitudinal use, we suggest one administration after students officially enter the major and a second near graduation. Discussion of SGE results with majors could take place at a departmental meeting.

When giving students instructions for the SGE, be sure that students understand that they are to respond regarding either their college goals, their goals for a specific course, or their goals in their major when answering most questions on the SGE. Based on experience that students forget they are answering the SGE for a specific course, we have inserted periodic reminders to do so throughout the IR-1 and IR-2.

Those who administer the SGE should not interpret particular items on it for students. Rather, if questions of interpretation are asked, they should say that the survey is designed to find out what the item means to the students. There is no time limit on the completion of the SGE but the instructions indicate the student should work fairly rapidly in order to avoid reading too many nuances into the goal items.

7. Scoring the SGE

Student responses to the SGE-IR can be recorded directly on the survey except for any items added locally. We have provided a separate answer sheet for local items. (Note that in this respect the SGE-IR differs from the shorter SGE-CR, where answer spaces are embedded in the instrument.) We haven't developed machine scoring system for this field-test version of the SGE, but it is possible to use a locally available scoring system.

Although we have suggested simple hand scoring for classroom research uses of the SGE-CR to enable prompt class discussion, we suggest data entry and computer analysis for the SGE-IR. A computer data base can be repeatedly updated and linked with other information. In Appendix 1 we have supplied suggested course (and major) code lists and a data entry plan with consistent variable names for all versions of the SGE, even the Classroom Research Versions. After coding courses and majors and examining open ended questions to ensure proper format and consistency of student responses, data entry personnel can work directly from the SGE booklets, creating a comprehensive data base. According to local facilities, the data file can be read by SPSSX, OSIRIS, SAS, SYSTAT, MINITAB, or other statistical analysis programs.

Because colleges offer diverse courses and majors, and because students often express their major and career intentions best in their own words, we decided against embedding a detailed code sheet in the SGE-IR from which students would select appropriate codes when answering these types of questions. We have merely asked them to write the name of the course, the name

of their intended major, and their current career choice. The researcher will need to convert these responses to computer codes. In Appendix 1, we have supplied coding schemes that we have found helpful for four-year colleges. The simplified code list we suggest as most useful somewhat resembles the old federal HEGIS (Higher Education General Information System) coding system. The entire HEGIS code is also provided in the appendix. The newer IPEDS system (Integrated Postsecondary Education Data System) better represents the vast diversity of "postsecondary" education and may be useful if convenient. We have not included it because of its length. Institutional researchers may wish, however, to code student-contributed courses, majors and careers according to IPEDS or some other locally accepted plan to be consistent with other institutional reports.

In Tables 44-49, we have summarized the SGE item numbers for each SGE scale. We assume that after examining the frequency distribution of the data, the researcher will wish to compute the various scale scores and store them permanently in the data file.

Mean Scores on Scales

All scale means are calculated for each student respondent by summing the values of responses to each item on the scale (values range from 1 to 4) and dividing by the number of actual items summed. Thus, as with the item scores, the mean score for the scale will range from 1-4. In Tables 44-49, we suggest the minimum number of item responses that should be complete to obtain a meaningful score for each scale. If a student has completed less than this number of items, no score should be calculated for her.

Of course, researchers may wish to use other scale construction methods, such as summing the items and standardizing the scales to a consistent pre-specified mean and standard deviation (such as Z-score units or a mean of 50 and a standard deviation of 10). We have not done so to avoid conveying the notion that there are norms or known percentile scores for some normative group on the SGE.

8. Developing Group Profiles

With the exception of the Subject-Specific scales, the SGE-IR scales were derived by factor-analysis. Thus, they are groups of items that tend to be answered similarly by students. They serve as a starting point for interpretation by grouping the items in a meaningful manner. If certain groups of students answer some items in a quite different way, you may wish to explore the reason for this.

We suggest that the General Academic Orientation Scales, Levels of Confidence Scales, Goal Attribute Scales, and College Goal Scales be computed and stored permanently in the data base for use as primary variables in a variety of data analyses. As we did for instructors using the SGE-CR set of inventories, we suggest that data ordinarily be displayed in graphic profiles. This is because lists of means and standard deviations take on more precision with some readers than they merit. In Figure 2 below, we show three types of appropriate displays for the General Academic Orientation Scales of a group of biology students. The first displays only means, while the next (technically incorrect) connects the points to form a profile of scores. The third shows the mean scores of a departmental group of faculty members (a fictional case) overlaying the scores of their student majors. Of course, since the SGE is useful only for groups of students, profiles should never be displayed for individual students.

Table 44

Summary of Items on Goals for Attending College Scales

Scale	Items Contained on Scale	Number of Items Needed to Calculate Scale
Prepare for Career and Graduate/ Professional School	1,3,9,10,13,19	5
Acquire General Education	2,4,5,7,11,12,16,17,18	7
Nondirected	6,8,14,15	3

Table 45

Summary of Items on Subject-Specific Goal Scales

Scale	Items Contained on Scale	Number of Items Needed to Calculate Scale
English	6,14,19,24,25,29,33,62,65,83,84,85,91,102,107	12
History	14,18,28,29,37,53,60,68,69,72,75,96,98	10
Sociology	14,15,18,24,27,29,36,38,48,52,67,68,72,76,80	12
Psychology	18,24,38,67,71,72,80,86,89,100	7
Biology	29,38,48,70,71,88,90,92,97,101,103	8
Mathematics	59,63,71,78,90,104,109	5
Fine Arts	13,24,42,65,66,67,73,75,77,79,99,110	8
Romance Languages	14,15,18,48,60,72,75,80,82,84,96	8
Business	4,8,45,63,64,74,81,83,84,93,94,103,105	10
Strongly Endorsed	1,3,5,46,47,51,55,56,58,61,87	8

Table 46

Summary of Items on General Academic Orientation Scales

Scale	Items Contained on Scale	Number of Items Needed to Calculate Scale
Develop Creativity	65,66,73,75,79,77,110	6
Increase Self-Understanding	20,21,33,41,42,91,99,108	6
Improve Speaking Skills	83,84,107	2
Improve Reasoning Skills	4,10,11,30,31,32,36,39,47,49,52	8
Develop Life Philosophy	23,27,35,38,43,100	4
Understand the World Around Me	26,28,29,34,37,48,50,53	6
Work for Social Causes	68,69,72,76,80,82,92	5
Develop Scientific Inquiry Skills	70,71,90,97,101	4
Prepare for Career	54,63,64,74,81,93,94,95,105	7
Gain Expertise	45,46,51,55,58,61,87	5
Develop Human Relations Skills	7,12,13,15,16,22,24,44,67	7
Improve Numerical Ability	78,109,140	2
Value Learning for Its Own Sake	2,3,5,106	3
Understand Cultural Diversity	14,18,60,96,98	4
Improve Basic Skills	25,62,85,102	3

Table 47

Summary of Items on Feelings About Studying in This Course/Majo. Scales

Scale	Items Contained on Scale	Number of Items Needed to Calculate Scale
Goal Time Frame (long range)	1,2,3,4,15,16	4
Goal Time Frame (short range)	9,11,14	2
Goal Clarity	7,8,13	2
Goal Source (Expectations)	5,6,12	2
Goal Source (Self)	10,17,18	2

Table 48

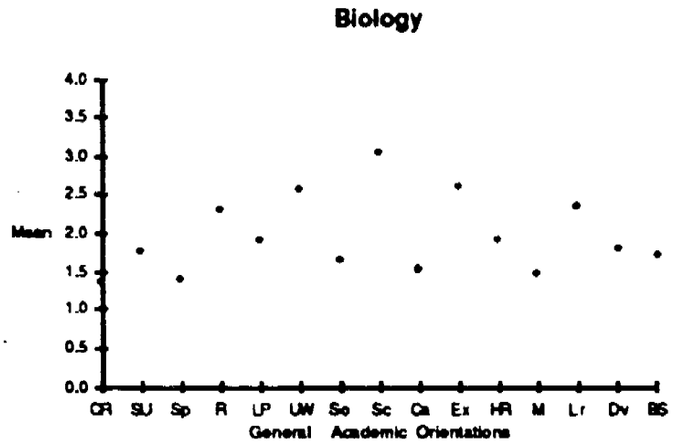
Summary of Items on Expectations and Study Skills Scales

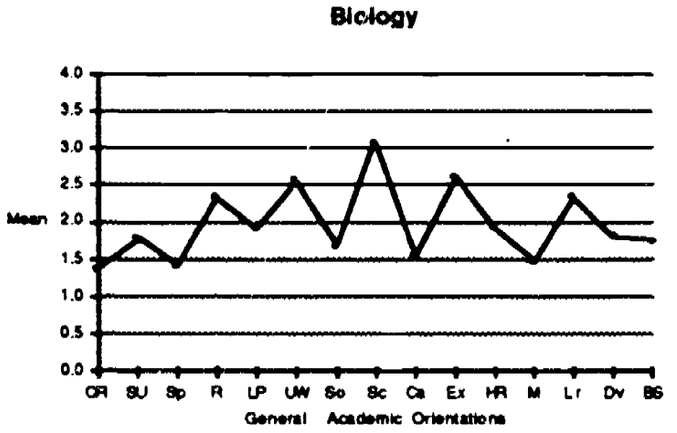
Scale	Items Contained on Scale	Number of Items Needed to Calculate Scale
Self-Confident Scholar	5,6,7,8,9,10,11,12,13,15,18	8
Anxious Students	1,2,3,4,14,16,17	5

Table 49

Summary of Items on Types of Activities Scales

Scale	Items Contained on Scale	Number of Items Needed to Calculate Scale
Relates and Applies Coursework	4,7,14,20,22	4
Interacts About Coursework	5,11,16,17	3
Explores Beyond Assignments	1,10,15,19	3
Concentrates on Task	6,13	2





KEY TO ABBREVIATIONS	
CR	Develop creativity
SU	Increase self-understanding
Sp	Improve speaking skills
R	Improve reasoning skills
LP	Develop a life philosophy
W	Understand world around me
So	Work for social causes
Sc	Develop scientific skills
Ca	Prepare for career
Ex	Gain expertise
HR	Develop human relations
M	Improve numerical ability
Dv	Understand cultural diversity
Lr	Value learning for its own sake
BS	Improve basic skills

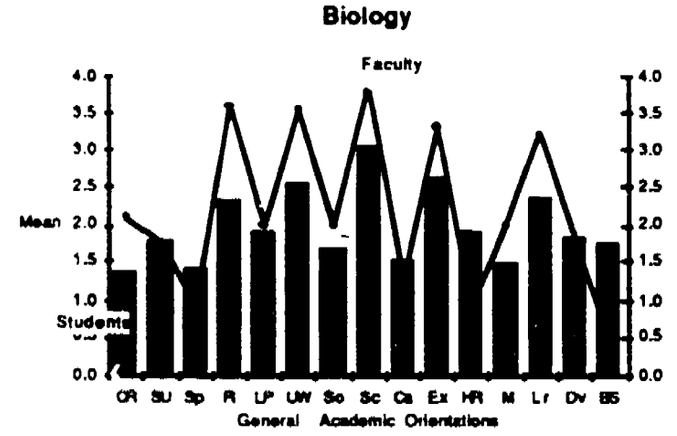


Figure 2. Sample profiles of student and faculty on SGE scales (Version C data, N = 114).

Subject-Specific Scales

We have provided "subject-specific scales" for only a few fields, those for which we pilot-tested the SGE. We have suggested that instructors using the SGE-CR administer the entire survey but choose among the items offered to develop groups of items that seem appropriate. Institutional researchers assisting groups of faculty members with this task might suggest that the choice proceed in either of two ways:

1. Prior to administration of the SGE, instructors may select items that they believe constitute a set that should be endorsed more highly in their course or major than others. The scale score calculated will then represent how closely students' views approach their instructors' views. After data have been tabulated, the researcher will want to help the faculty members scan for other items that students hold as strong goals but that faculty failed to include.

2. In another method, the SGE can be administered first, followed by "sorts" and comparisons to determine which goal items actually were more typically endorsed by students studying in one field than in others. This list can then be compared with a faculty-generated list.

In short, researchers and faculty members working with the data base are free to construct their own subject-specific scales using the supplied SGE items, locally constructed items, or previously discarded SGE items from the pool in the Appendix 3. Depending on the approach used for construction, the scales will represent either what faculty believe should be the goals students endorse (akin to a "criterion-referenced approach" as in example #1 above) or what students express as their views (more like a "norm-referenced approach" as in example #2 above). The researcher has responsibility to help faculty members understand the difference between the two.

The only Subject-Specific Scale score that should be calculated is that most pertinent to the course or major in which the student was responding. This may be either an existing SGE-IR Subject Specific Scale or one that faculty member have helped to construct as described above. Calculating any scale for a course or major that the student was not keeping in mind as a response stimulus produces COMPUTER GARBAGE. We emphasize this strongly because although it is possible to calculate a score on the English sub-scale for students who were responding for a biology course, that score is not meaningful. If retained, the score could be interpreted erroneously at some later date as "how biology students viewed their English courses." (We note, as an exception, that there was a legitimate use of these scores *during scale construction* only to demonstrate that student response for the targeted course was different than for other courses.)

Recall that the "Strongly Endorsed Scale" received its name because students in diverse introductory classes indicated that these goals were very important or essential. It is appropriate to calculate this scale for all courses as a measure of how strongly the students endorse this general scale for each courses. If scores on this scale do not show reasonably strong endorsement for some groups, one might seek the reasons.

9. Linking With Other Data Bases

We assume that researchers habitually document data bases carefully, including necessary explanations of the limits of the data and the caveats for their use. Based on this assumption,

the institutional researcher is in a good position to link data from the SGE with other data bases. The SGE file documentation should warn against use of the data in individual advising or counseling, stress that the stimulus for answering the questions was a specific course or major, and indicate that student goals may change during the college experience.

As mentioned earlier, whether the researcher administers the SGE in class or sends it by mail, he or she needs to consider in advance what type of student identification number to associate with each data file. If students frequently participate in assessment activities or supply self-report data and their trust has not been violated by misuse of data, most probably they will not hesitate to supply their ID numbers. This provides the easiest link with other data. To preserve confidentiality, substitute ID numbers can be assigned by the researcher and linked with real student numbers in a file with limited availability. Or substitute ID numbers can be known only to the student. In this last alternative, data from two or more SGE administrations separated in time can be linked, but linkage with other data bases is not possible.

Note that SGE-IR-1 solicits more student demographic data than do SGE-IR-2 and SGE-IR-M but some basic items like age, gender, year of high school graduation are deliberately maintained in all versions. This serves as a cross check on non-serious responses. Any case for which these data differ substantially for the same ID number at two administration points is suspect and should be discarded.

With data linkages, a wide variety of studies can be conducted that include the SGE-IR data. These will depend upon local interest and the type of student information system available. The SGE file can be linked with student academic input measures such as aptitude tests (the SAT or ACT), and with other survey studies such as the American Council on Education/CIRP entering student questionnaire. Transcript data, such as numbers and types of courses completed, majors actually chosen, and grade point averages achieved can be linked. Finally, outcome measures, such as ACT-COMP (American College Testing Service), The Academic Profile (Educational Testing Service), or the Graduate Record Examinations (Educational Testing Service), or various student satisfaction surveys (e.g., NCHEMS Student Outcome Service) can be linked. Because of the subject-specific nature of the SGE-IR, the researcher must be sure that all students grouped as data sets for such studies responded to the SGE for the same stimulus (a specific course or major). It would <u>not</u> be appropriate to assemble SGE scores for responses to different courses and use a general education test as an outcome measure. (Currently some collaborators are experimenting, however, with using general education as the goal target.)

One important type of study that typically can be conducted by institutional researchers, but seldom by individual faculty members using the SGE-CR versions, is a hierarchical regression analysis to assess the effect of student goals on outcomes. Although the data will vary on a given campus, the general procedure is to regress an outcome score on both control and independent predictor variables. The outcome score may be obtained from a course examination (for a given class or multi-section course) or be another outcome measure such as a GRE achievement test score or a comprehensive examination (for a major field). In such cases, measures of relevant student goals when beginning the course or major (for example, scores on pertinent General Academic Orientation Scales) become control variables, along with available measures of prior preparation or aptitude in that subject and any demographic variables assumed to be important to success in the field. Alternatively, student goal scores can be examined for their direct effect on outcomes by including them as predictor variables after other designated control variables are already in the regression equation. In addition to the caveat about being sure that all students included in the regression study responded to the SGE for a specific field, we caution that the regressions should have an N of at least 50 students

to be stable. Prior research suggests that regression equations may differ for men and women students and for students from different ethnic backgrounds.

When using the part of the SGE-IR-2 entitled "Types of Activity in This Class," researchers who have administered Pace's Quality of Student Experience scales may particularly want to link the SGE results for courses and majors with similar responses for the college experience generally. (Since we used items from precursor studies that Pace may have not eventually included in the CSEQ, checks should be made for differences in wording.)

10. Reporting Results

Institutional researchers will need to tailor reports of studies using the SGE to the study purpose and intended audience. It is convenient to classify the types of potential studies in three levels of complexity; different reports and different data interpretations are merited in each case.

At the first level, studies simply describe the goals of the students in a course or major. Also at a descriptive level, studies may compare students in more than one course or major. Remembering that the SGE is intended to report the goals of groups of students, we suggest that the descriptive data about either mean scale scores or item scores be reported according to the four-point Likert-type scales on which students marked their response. This allows direct interpretation of scale and item scores. That is, a mean score from 3.5 to 4.0 should be viewed as an essential goal, from 2.5 to 3.5 as important, from 1.5 to 2.5 as somewhat important and from 1.0 to 1.5 as not important. We suggest that mean scores be reported with not more than one digit to the right of the decimal. Ranking according to the second decimal place runs the risk of over-dramatizing differences. That is, for most practical purposes, a group of students with mean scores of 2.54 and 2.58 on two scales are saying that both of these goals are "important" to them. Alternatively, reports of the percent of students who endorsed (or did not endorse) goal items of interest may be of greatest interest to faculty members. Either scale scores or percentages can also be ranked to show what sets of goals students in a particular course or major thought to be most important.

Researchers may wish to use t-tests or analysis of variance to compare the scale or item scores of groups of students. We caution, however, that what is statistically significant may not be meaningful to faculty members. It may be better for the researcher to estimate what constitutes a "meaningful" difference between groups or to ask that faculty make this estimate. Of course, all reports should indicate the percentage of the desired student population who answered the SGE.

A second level of reporting SGE results involves comparing SGE goal profiles for a group of students at two points in time. An example is a comparison of goals endorsed by students just entering a major and students exiting the major at graduation. One necessary caution here is to be sure that the comparison is made between the scores of students who were in the group at both points in time. A second caution is to make the audience aware of possible testing effects, maturation effects, and difficulties in examining change scores such as ceiling and floor effects for those initially scoring at the extremes on the scale Regarding the change scores, some students will change their goals in one direction and some in another direction. Therefore, we suggest two ways of reporting. Which is used will depend upon what proportion of students changed in each direction. If one direction is predominant, method #1 could be used.

1. To estimate the magnitude of change that has taken place, one can take the absolute value of each change score (subtract, then take the positive value of the difference) and

average the resulting scores to show the average magnitude of change. This can be accompanied by a report showing the percent of students who changed in each direction.

2. Another method to be used when about the same numbers of students change goals in each direction is to tally students changing in each direction separately and report the numbers of students and average magnitude of the change for each group.

In either of the above two cases, we suggest that graphing a profile of the scores at time 1 and at time 2 may be more useful than reporting figures. Unusual perturbations in the profile can provoke faculty discussion about major change within the limits of the accuracy of the change scores.

At the third level of reporting, the researcher may wish to try to attribute change in goals over time, or achievement of outcomes, to some source. In a planned experiment, for example, an instructor may agree to provide more attention to goals in a course, or to change course communication patterns in other ways, in attempts to influence student goals. The research question is whether students involved in such an experiment will exhibit more goal change on the SGE than a similar class that was not involved. Or, as previously described, the researcher may wish to use the goal scores as control or predictor variables in regression analyses that attempt to predict student outcomes. In these types of studies, standard social science reporting methods should be followed to ensure that all of the decision rules and limitations of the study as well as its major findings are clear to the reader. An executive summary may be provided for readers unfamiliar with the statistical methods. The audience should understand that technically such studies never fully ascribe a source of change or achievement since it is impossible to rule out all of the alternative reasons that the change or achievement may have taken place.

11. Cautions and Limitations

Since students' self-reports are usually quite accurate (Baird, 1976), there is reason to take them quite seriously. When any survey instrument is repeatedly administered, however, one must be aware that in the second administration respondents will reflect experience gained in the first administration. We expect that for repeated administrators on the SGE-IR versions, student goals will shift somewhat for at least three different reasons: the effect of previous testing, measurement error, and actual goal change. If instructors or researchers discuss SGE results with students or make other specific attempts to influence student goals, this will produce changes in post-test responses. We suggest therefore that different types of research be separated. Use one course or program to experiment with the effect of discussion about the SGE results. Use a different course or program to conduct longitudinal studies of goal change.

The SGE-IR scores should not be used in admissions, placement or any other evaluation or decision affecting an individual student.

12. Conclusion

The Institutional Research versions of the SGE are designed to collect comprehensive data on students' goals in multiple classes or programs. These versions of the SGE are extensive, and allow for theoretically-based studies of the relationships among many sets of variables.

This section of the SGE User's Manual has presented several examples of how to use the instrument at the institutional research level, and provides guidelines and caveats regarding data collection and interpretation. Within these guidelines, however, the possible uses of the SGE are much more varied than those discussed here. Experimental uses, in which some students or sections are administered a "treatment" and some are not, are particularly promising. So, too, are the possibilities of linking SGE data with other data bases, such as those recording students' GPA, major choice, or standardized test scores. We encourage institutional researchers and others using the SGE-IR versions to adapt and modify these instruments for their purposes.

SECTION III. TECHNICAL INFORMATION

1. Steps in Developing the SGE: 1986-1990

In developing the Student Goals Exploration, the following steps were taken:

1. A pool of potential goal statements was developed that focused on general goals for college and goals for ten selected undergraduate subjects often included in students' college programs.

2. The item pool was expanded based on interviews with 109 undergraduate students in the ten fields at eight colleges.

3. After a literature review, a conceptual framework was developed that related college goals, course goals and emerging measures of motivation orientations, expectations of success, study strategies, educational purpose, preference for specific educational processes, and course effort. (See Figure 1, Section 1)

4. Each goal statement was classified by multiple raters to ensure coverage of the various goal domains represented in the conceptual framework.

5. Content validity of items was developed through:

   (a) focus group discussions with undergraduate students

   (b) responses from faculty teaching in the selected undergraduate fields.

6. In Pilot Study I (fall term 1988), Versions A (pre-test) and B (trial post-test) were administered to students enrolled in the ten classes at three geographically dispersed four-year comprehensive public universities. Pilot Study I included the following steps:

   (a) Two preliminary early-term forms were administered. SGE (Versions A-1 and A-2) contained 185 unique course-related goal items as well as item sets representing potentially related concepts. Responses from 1152 students in ten selected introductory subjects at the three universities were analyzed.

   (b) Responses to a late-term form of the SGE (Version B, N = 807) were obtained to extend the goal domain beyond that feasible in Version A and to introduce items tapping concepts more appropriately measured late in the term, such as reported effort.

   (c) Early-course and late-course responses were compared for students completing both Versions A and B (N = 492) to provide estimates of item stability over a term course.

   (d) Correlated sets of goal items (or "factors") underlying the varied parts of the instrument when answered by introductory students were identified.

7. Discriminant validity was explored through administration of a refined SGE (Version M) to upper-class majors (N = 411) in the same disciplines as the introductory course respondents. Through factor analysis and univariate group comparisons, scales that discriminate among students in different majors and courses were tentatively established. General orientations to college characterizing upperclassmen were identified for later comparison with those of students in introductory courses.

8. Versions C and D were constructed to be used as early and late term versions, respectively, in Pilot Study II of students in introductory college courses during 1989-90.

9. At the beginning of fall term 1989, Version C was distributed to 3,300 students (60 from each of 10 introductory classes in 5 colleges; 30 from each in a smaller college), and 1,182 usable responses were obtained. Version C had a special college goal section constructed for a study of the relation of reference group goal conflict and goal change. To study the concurrent validity of the SGE scales, Version C also was accompanied by either the Goal Instability Scale and the Need for Cognition Scale, or the LOGO II scales. Results of this administration included excellent alpha reliabilities for most of the refined scales and evidence of concurrent validity based on the previously published scales. A comparison of responses for students enrolled in the same disciplines at different colleges provided evidence that the scales measuring student goals for similar introductory courses may reflect college diversity.

10. At end of the fall 1989 term, Version D was distributed to 1182 students who had completed Version C, yielding 471 usable responses.

11. After examining results from the administration of Versions C and D, slight adjustments were made to reduce the number of items in some scales. Instructions to student respondents were rewritten to facilitate local use and it was decided to produce both a Classroom Research Set and an Institutional Research Set of the SGE instruments.

12. This User's Manual originally was constructed to guide collaborators interested in field testing the SGE. The original manual contained (1) an introduction to the SGE, (2) a user's guide for instructors and academic leaders desiring information about classroom research uses of SGE, (3) a user's guide for institutional researchers or other researchers, (4) technical information, and (5) revised field test SGE sets. The Institutional Research Set: IR-1 (revised from Version C), IR-2 (revised from Version D) and IR-M (revised from Version M), and the Classroom Research Set, which are briefer versions of the IR instruments more suitable for use by the classroom instructor and designated CR-1, CR-2, and CR-M. Upon the advice of collaborators, the manual was split into two guides: one for classroom researchers and one for other researchers.

2. Pilot Test Samples for the SGE: 1986-1990

During the early period of development of the SGE, we focused on building a suitable pool of items that reflect course-specific goals and related constructs for students. These early pilot tests provided little immediate feedback to students or faculty members at the seven universities who cooperated with us: (Ball State University, Jersey City State College, Marquette University, South Dakota State University, University of Montevallo, Western Carolina State University, Western Michigan University). We greatly appreciate their help.

While "representativeness" was not a major concern in pilot testing, we tried to select cooperating institutions from four-year colleges with diverse programs and student bodies. The characteristics of the colleges are shown in Table 50. Since we recently had interviewed and surveyed faculty members about course planning in a set of introductory courses that many college students take, we continued to consider those disciplines when constructing the SGE. An advantage of this decision was that we had on hand a large reserve of faculty-

generated goal statements for these fields to use. We had also interviewed students about their goals in these courses. Although introduction to business did not fit our definition of an introductory course as well as other courses did, we continued to include it because it typically is taken by about 25% of undergraduate students. The specific set of courses that we used is shown in Table 51 as we described them for participating colleges. The distribution of students enrolled in those courses completing the various pilot test versions of the SGE is shown in Table 52.

In most of our collaborating colleges, there were multiple course sections of some of the selected courses. To minimize the influence of specific instructors' unique goals for their introductory courses and the possibility that students with unique goals had selected sections with a particular instructor, we asked that the SGE be distributed randomly among students from the total course list.

Table 50

Characteristics of Colleges Collaborating in Pilot Tests (Version C)

	Colleges					
Characteristics	A (*n*=118)	B (*n*=92)	C (*n*=276)	D (*n*=459)	E (*n*=95)	F (*n*=142)
Enrollment	2,252	14,507	5,224	8,819	6,020	16,274
Estimated % minority students	9	5	41	9	2	10
Carnegie classification	Comp I	Doc I	Comp I	Doc I	Comp I	Doc I
Location	South	Midwest	East	Midwest	Midwest	Midwest
Type of location*	small town	city	city	metro area	rural	city
Control	public	public	public	independent	public	public

* metro area = population of 500,000+
city = population of 50,000 to < 500,000
small town = population of < 50,000
rural = outside any center of concentrated population

Table 51

List of Course Types Included in the Survey

1. **Freshman composition.** These writing courses are taken by beginning students with average preparation. They may be required or strongly suggested for all or some of the students.

2. **Introductory literature.** These courses may cover any genre of literature, but they should represent undergraduate students' first encounter with literature taught at the college level.

3. **History.** These may be courses in either American history or "Western Civilization." They should represent the first college level history courses students might take.

4. **Sociology.** These should be introductory sociology courses typically taken by lower division students as first social science electives or to meet distribution requirements.

5. **Psychology.** These should be introductory psychology courses typically taken by lower division students as first electives or to meet distribution requirements. It is not important whether psychology is classified as a natural science or a social/behavioral science.

6. **Biology.** These should be the first biology courses that lower division students take in college. They may be taken by prospective majors, by general studies students, or by both groups.

7. **Mathematics.** The courses should be introductory mathematics courses taught at or above the level of college algebra.

8. **Introductory Fine Arts.** These non-performance courses should be those elected by lower division students as first college courses in any of the arts. They should be designed to achieve cultural or historical understanding rather than skill development.

9. **Romance Language.** These will be beginning courses in French, Spanish, or Italian that are taken by students without prior background or whose test scores indicated they should repeat an introductory course.

10. **Introduction to Business.** This will be the first course offered to students planning to study some area of business or business administration. Although not all business programs offer such survey courses, those that do frequently plan the course to provide a broad view of the field.

Table 52

Distribution of Student Respondents by Introductory Course and Version of SGE

Courses	Survey version[1]							
	A-1	A-2	B	A and B	M	M (weighted)	C	D
Composition[2]	52	48	83	66	5	–	100	38
Literature	64	59	88	52	24	40	121	69
History	98	104	108	80	18	40	102	37
Psychology	40	48	27	16	30	40	134	69
Sociology	43	44	56	33	10	40	154	58
Biology	35	45	56	26	11	40	117	44
Mathematics	31	52	121	50	21	40	109	28
Arts[2]	67	75	96	68	53	40	108	47
Romance language	58	62	78	45	10	40	124	42
Business	54	55	76	55	225	40	113	49
Missing			18					
Total	542	592	807	491	407	400	1182	481

[1] Survey versions for courses were Versions A-1, A-2, B, C, and D; survey version for majors was Version M.

[2] There were few English majors concentrating in writing so these responses were recombined with those majoring in literature. We know, however, that the two orientations may differ. Data were collected on the specific focus for fine arts majors, and for many analyses, they were examined as two groups: (1) music, dance, theater; (2) art.

To avoid using class time and to preserve student anonymity, we asked that the SGE be distributed to the selected students in classes, but completed out of class, sealed, and sent to a collection point for direct return to NCRIPTAL. Since there are no "correct" responses to student goal items and we did not plan to construct norms for the SGE, we were not unduly concerned about the "representativeness" of the student sample. Because of these procedures, however, it is virtually certain that the students who responded were more cooperative than those who did not. Also, a higher percentage of women than men responded. The characteristics of students responding to each of the pilot test versions in Pilot Tests I and II are shown in Table 53. A comparison of the same student characteristics for the six colleges participating in Pilot Test II in 1989-90 (Versions C and D) is shown in Table 54.

3. Derivation of the Scales

Scales for SGE Sections Related to Course Goals

Factor analysis of student responses in the selected introductory courses for Versions A and B gave us a sense of the underlying factors that might emerge from each section of the SGE. Using pilot Version M, we administered a reduced list of items to upper-class students majoring in the same fields as the selected introductory courses. We found that for several sections of the SGE--those concerned with concepts related to course goals (see Figure 1, Section 1), the factors remained quite stable. These sections included: Goals in Attending College, Expectations and Study Skills in the Course (or Major), and Types of Activities Pursued in the Course (or Major).

At this stage, stability was not achieved for the set of items entitled Feelings about Studying in the Course (or Major). We changed a few items several times, hoping to tap various goal attributes we had identified from the literature, such as clarity, temporality, and origin. (See Stark, Shaw, and Lowther, 1989 for a full discussion of these attributes.) Factor analysis of the first set of items we used seemed to capture these dimensions only modestly. Through several pilot tests we have managed to improve the face validity and factor structure of the scales somewhat. However, as we have noted in Section 1, two of the scales still have low internal consistency.

Table 53

Characteristics of Student Response Groups

Characteristics	Student response by version of SGE administered					
	A (*n*=1134)	B (*n*=807)	A and B (*n*=491)	M (*n*=407)	C (*n*=1182)	D (*n*=481)
Mean age	20.4	20.4	20.7	24.9	19.1	19.3
% female	61.2	61.3	65.1	62.3	61.9	66.9
% white	80.7	82.5	81.2	88.2	81.4	NA
% freshmen and sophomores	72.4	71.8	71.8	2.2	82.5	NA
% declared major	67.2	72.3	67.4	99.8	60.9	60.7
% certain about major	76.5	81.8	79.6	94.9	75.0	74.2
% certain about future career	72.2	79.6	75.3	83.5	68.2	65.7
	Percent of total response from each college					
College 1*	20.8	21.4	21.0	–	–	–
College 2 (C)	41.6	47.8	42.4	75.4	23.4	24.7
College 3 (B)	37.6	30.7	36.7	24.6	7.8	7.3
College 4 (A)	–	–	–	–	10.0	9.8
College 5 (D)	–	–	–	–	38.8	33.3
College 6 (E)	–	–	–	–	8.1	8.1
College 7 (F)	–	–	–	–	12.0	16.8
Total	100.0	99.9	100.1	100.0	100.1	100.0

* College 1 did not continue for Pilot Study II.

Table 54

Characteristics of Participating Students in Collaborating Colleges (Version C, Fall, 1989)

	Colleges						
Characteristics	All (*N*=1182)	A (*n*=118)	B (*n*=92)	C (*n*=276)	D (*n*=459)	E (*n*=95)	F (*n*=142)
Mean age (years)	19.1	18.5	19.5	21.2	18.1	20.0	17.8
% female	61.9	71.2	65.2	60.5	56.0	58.9	76.1
% white	81.4	92.4	92.4	45.3	86.7	95.8	91.5
% freshmen and sophomores	82.5	85.6	72.9	71.7	82.8	78.9	95.1
% declared major	60.9	73.7	78.3	46.0	59.3	77.9	52.8
% certain about major*	75.0	67.8	81.5	80.1	71.9	76.9	63.3
% certain about future career*	68.2	57.7	68.5	74.2	63.8	74.7	54.9
% of sample	100.0	10.0	7.8	23.4	38.8	8.0	12.0

* total percent of students who indicated "extremely" or "quite" certain

The General Academic Orientation Scales

From the 110 items in the SGE section which ask students to indicate how strongly they hold goals for a specific course we constructed two entirely separate sets of scales, derived in different ways. These are the General Academic Orientation Scales derived by factor analysis, and the Subject-Specific Scales, derived by collecting items endorsed by students studying a specific subject. A goal item may be on only one General Academic Orientation Scale, but it may be on more than one Subject-Specific Scale.

We dealt with a changing pool of items throughout the several pilot tests, so a complete description of each iteration is not of value. Rather, we provide below a few pertinent comments on the derivation of the General Academic Orientation Scales.

Since we asked students to think about a particular course when answering the SGE, the pilot study distributions of SGE item or scale means for an aggregate sample are, strictly speaking, not meaningful statistics. This is because for most of the scales, the aggregated sample means might differ if students from a different mix of courses had been surveyed. For the General Academic Orientation Scales, however, which were derived from factors underlying a large set of course goal items, we believe that very similar clusters of items would have emerged regardless of the mix of courses used to derive them. In fact, the factors we derived from the initial item pool, which formed the basis for these scales, remained quite stable through successive pilot tests and expansion from three to six universities. Hence, the General Academic Orientation Scales probably represent a set of goal dimensions for general learning typically held by students in introductory courses in four-year colleges.

The same set of goal dimensions may not characterize students at each level of their college education, however. Although items varied somewhat through the pilot testing, similar factors did emerge from the items for Version A and Version C, both completed by students in introductory courses. For Version M, completed by upperclassmen with regard to their majors, only nine factors were derived, compared to 15 for the introductory students. The nine factors, the number of items on each, and their reliabilities are given in Table 55 below.

Several of the nine factor-based scales for majors shown in Table 55 encompass more than one of the 15 scales of the SGE derived from responses of introductory course students. They were also more distinct. That is, items tended to load strongly on only one of the nine factors. In comparison, for the 15 factors derived for introductory students, many items loaded modestly on several factors, making necessary a judgment about which scale to assign the item. Because it is easier to aggregate dimensions than to separate them, we decided to use the 15 scales from Version C as the SGE General Academic Orientation Scales. We believe this will allow researchers and instructors to examine student goal orientations more easily and relate them specifically to learning activities. From another perspective, however, it would be possible to use the nine dimensions that emerged for upper-class majors as a comparison point for introductory students.

Table 55

Nine General Academic Orientations Toward the Major

	Number of items	Reliability
1. Increase my world understanding, work for peace, harmony, social improvement	22	.94
2. Develop personal independence, self-understanding, life philosophy	15	.90
3. Develop scientific/investigative skills	14	.91
4. Build career success	13	.90
5. Develop reasoning and decision-making skills	14	.90
6. Develop aesthetic, creative, leisure time interests	10	.86
7. Acquire useful expertise, achieve credibility	10	.82
8. Develop social relations/skills	8	.86
9. Develop basic information-seeking and study skills	6	.84

Table 56

Rank Order of Mean Scores on Subject-Specific Scales

		Scales								
Samples	*N*	Eng	His	Soc	Psy	Bio	Math	Arts	Lang	Bus
English Composition	100	1*	9	9		9		1		
Literature	120	2					10			
History	102		1*	2					2	
Sociology	153		2	1*	1	2			1	2
Psychology	134			2	2					
Biology	113	9				1*		10	9	9
Math	106	10	10	10	10		1*	9	10	
Fine Arts	107				9		10	2		10
Romance Language	124					10	10		3	
Business	112						2			1*

The differing factor structures that emerged for introductory and major-level students caused us to wonder about the reasons for such differences. One possible explanation involves variations in the items. We made some minor wording changes in items between Version M and Version C. We believe, however, that these changes were not sufficient to cause the difference in the factors. A second possible explanation concerns the sampling. The upperclassmen were not an equivalent cross-sectional group to the students in the introductory courses. Upperclassmen, as identified by the selection methods, were majoring either in one of the selected liberal arts fields (about 45%) or in business (about 55%). Students in other majors offered by the colleges were not sampled. Yet, the students in introductory courses expected to select a much greater variety of potential majors, including such fields as engineering, nursing, and education, career fields.

From the standpoint of student academic development, the third possible explanation is more interesting. Perhaps as students move through their college experience, some goals become more intertwined or even merge. To illustrate, the first goal factor derived for majors included portions of at least three of the introductory level scales: Understand the World Around Me, Understand Cultural Diversity, and Work for Social Causes. The second factor combined Developing Self-understanding and Developing a Life Philosophy. Together these two factors accounted for 32% of the variance in the item set; the remaining seven factors were much less strong. Now that the items on the IR-1 and IR-M are exactly the same in the field test versions of the SGE, it will be possible to explore the number of dimensions for comparable samples of introductory and advanced students more completely.

Subject-Specific Scales

The subject-specific scales were first derived by examining the responses for students enrolled in each introductory course when pilot Versions A and B were administered. All of the goals that students endorsed strongly for that subject were assigned to its specific scale. When items were endorsed strongly by students in more than one subject, they were assigned to both scales. After the mean scale scores were computed for the strongly endorsed items, analyses of variance were conducted for each scale to ensure that students enrolled in the designated subject scored highest on the scale. They did, with one exception. Because the scales for sociology and psychology had many items in common, sociology students scored as high as psychology students on the psychology scale. If we had included in our pilot tests other subjects for which students may hold very similar goals (for example, physics and mathematics), we might have found other pairs of scales that tended to converge.

As a test of discriminant validity (to be discussed shortly), we then examined the ability of these scales to differentiate among upper-class students who answered Version M for their major. The scales served to distinguish students majoring in the different fields somewhat more sharply than was true for introductory students.

On the basis of the information from Version M, we made some adjustments in the items to be included on many of the Subject-Specific Scales for use in pilot Version C. On the assumption that goals of the upperclass students were based on greater experience and realism, we included all items that students majoring in the field had endorsed strongly. Such items can provide faculty with a baseline against which to measure students changes toward goals often associated with the study in the field. But we also retained in the scales some items that had been endorsed for the subject by introductory course students, but not by upperclassmen. Two examples include the goal for introductory students that their sociology course will improve their social skills, and their psychology course will help them solve personal problems. While these students' goals may be achieved, they may represent a naive view of these disciplines. By

retaining them in the scales, however, we provide an opportunity for instructors using the SGE-CR to discuss the differences between their intended course goals and some that students naively endorse.

Table 56 shows some rank orders of mean scores on each Subject-Specific Scale based on responses (Version C) of students enrolled in the target subject and other courses. The table serves to illustrate the fact that students in the specified courses (and closely related subjects) usually score highest on the Subject-Specific Scale; students in other fields don't hold these same goals as strongly for their courses. We have used ranks because the mean scores themselves are so dependent on the composition of the pilot study sample. And we have shown only the two fields ranked highest and the two ranked lowest on each scale to avoid unwarranted comparisons among subjects in the middle-ranks.

Table 56 is based on results from the particular mix of introductory students responding to SGE-Version C. As the rank orders indicate, the psychology scale does not distinguish these students from sociology students. Two additional cases emerged in this data set where the scales fail to distinguish among introductory course students: students in English composition score as high as fine arts students on the fine arts scale and both sociology and history students score as high as Romance language students on the Romance language scale. We believe the common element in the first instance is goal items focusing on creativity; and in the second, items focusing on goals of understanding culture and cultural diversity. We can also observe in Table 56 that students goals for mathematics and biology are most distinct from goals for the other subjects.

These comparisons confirm traditional notions about student goals in their courses and thus constitute one type of face validity for the scales. The results also have interesting potential for considering interdisciplinary linkages among the academic subjects based on the similarity of goals that students expect them to fulfill. Introductory students' goals were undoubtedly influenced by whether the course was a self-directed choice or a curriculum requirement to be disposed of. Although we have not analyzed the data yet, the SGE versions for introductory courses ask students to indicate whether they took the course because it is required, allowing comparisons of these two groups. Based on our interviews with faculty members in these same fields, however, we suspect students' goals differ considerably from those held by the faculty. It is for this reason that we encourage faculty members using the SGE-CR to build their own scale for their subject.

4. Scale Intercorrelations

Students simultaneously have many goals for college and for their specific courses; these goals are not independent. As a consequence, the goal scales represented by sets of items in the SGE are often strongly correlated. Tables 59-65 show the correlation of scales within and between each of the SGE sections. We discuss notable aspects of these tables below.

The correlations in Table 57 illustrate that students may endorse more than one type of goal for going to college. The desire to gain general education and the desire to prepare for a career definitely are not independent. The "non-directed" scale which, to some extent implies a lack of clear college goals, is also correlated with the others. This is probably because some of the items on the scale incorporate typical social goals for going to college that may be held simultaneously with academic goals.

Table 57

Correlations of Goals for Attending College (N = 1150)

Scales	Scales		
	General education 1	Career 2	Non-directed 3
1. Acquire a general education	1.00		
2. Prepare for career and/or graduate/professional school	.42	1.00	
3. Non-directed	.40	.37	1.00

In Table 58 we observe that, with one exception, the 15 General Academic Orientation Scales are positively correlated with each other. The only negative correlation is between the goals of Improving Numerical Ability and Understanding Cultural Diversity. This small negative relationship is consistent with the somewhat distinct set of goals for students in mathematics courses.

The correlations among the Subject-Specific Scale means in Table 59 merely portray that, to varying degrees, the scales contain items in common. Strictly speaking, such correlations should not be calculated because, as we have stressed, a student should be assigned a Subject-Specific Scale score only for the course in which he/she responded and the Universally Endorsed Scale. In Table 60 we violate this rule once more to illustrate the correlations between the General Academic Orientation Scales and the Subject-Specific Scales. The positive figures portray the considerable overlap among the items in these two non-exclusive sets of scales.

In Table 61, students' college goals are related to their scores on the 15 General Academic Orientations. Students with strong general education goals for college attendance tend to have strong goals for all of the academic orientations. In comparison, students with career preparation as their primary college goal less strongly endorse the general academic orientations. Correlations that stand out because they are close to zero are those correlations between the college goal of career preparation and orientations toward Developing Creativity, Working for Social Causes, Understanding Cultural Diversity, and Valuing Learning for its Own Sake. These findings reinforce the common view that students with strong goals for career preparation in college have somewhat narrower goals than those attending to gain a general education.

Table 58

Correlations of General Academic Orientations (N=1164)

General Academic Orientation Scales	General Academic Orientation Scales														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Develop creativity	1.00														
2. Increase self-understanding	.69	1.00													
3. Improve speaking skills	.59	.72	1.00												
4. Improve reasoning skills	.42	.71	.56	.00											
5. Develop a life philosophy	.53	.76	.62	.78	1.00										
6. Understand the world around me	.37	.54	.44	.74	.76	1.00									
7. Work for social causes	.46	.53	.52	.53	.69	69	1.00								
8. Develop scientific inquiry skills	.17	.29	.24	.44	.41	.53	.53	1.00							
9. Prepare for a career	.51	.67	.66	.56	.58	.46	.55	.38	1.00						
10. Gain expertise	.31	.58	.46	.68	.57	.53	.46	.47	.68	1.00					
11. Develop human relations	.45	.71	.60	.68	.74	.59	.63	.31	.58	.56	1.00				
12. Improve numerical ability	.19	.26	.22	.21	.15	.06	.20	.36	.53	.39	.14	1.00			
13. Value learning for its own sake	.39	.52	.39	.69	.60	.60	.45	.30	.30	.44	.49	.04	1.00		
14. Understand cultural diversity	.40	.39	.36	.44	.60	.69	.69	.25	.28	.25	.51	-.08	.51	1.00	
15. Improve basic skills	.53	.65	.71	.52	.51	.41	.38	.20	.55	.40	.50	.19	.32	.29	1.00

Table 59

Correlations of Subject-Specific Scales (N = 1125)

	Subject-Specific Scales									
Subject-Specific Scales	1	2	3	4	5	6	7	8	9	10
1. English	1.00									
2. History	.58	1.00								
3. Sociology	.72	.87	1.00							
4. Psychology	.68	.78	.93	1.00						
5. Biology	.52	.64	.72	.77	1.00					
6. Mathematics	.36	.23	.35	.45	.66	1.00				
7. Fine Arts	.84	.60	.74	.76	.56	.42	1.00			
8. Language	.70	.90	.91	.84	.62	.29	.75	1.00		
9. Introductory business	.73	.50	.66	.68	.65	.64	.79	.64	1.00	
10. Strongly endorsed	.63	.48	.64	.64	.63	.51	.63	.56	.73	1.00

Note: These scales are not independent; they have some stems in common.

Table 60

Correlations Between General Academic Orientation Scales and Subject-Specific Scales (N=1122)

General Orientation Scales	Subject-Specific Scales									
	Eng	His	Soc	Psy	Bio	Math	Art	Lang	Bus	Univ
1. Develop creativity	.67	.47	.50	.47	.35	.27	.85	.59	.53	.39
2. Increase self-understanding	.84	.50	.67	.67	.52	.41	.88	.64	.73	.67
3. Improve speaking skills	.85	.43	.59	.60	.44	.35	.79	.62	.75	.53
4. Improve reasoning skills	.72	.58	.77	.72	.66	.44	.66	.60	.69	.77
5. Develop a life philosophy	.73	.71	.87	.85	.67	.36	.77	.76	.67	.66
6. Understand the world around me	.61	.85	.84	.74	.76	.32	.56	.75	.56	.61
7. Work for social causes	.55	.82	.86	.85	.71	.41	.64	.85	.60	.49
8. Develop scientific inquiry skills	.28	.40	.45	.56	.89	.67	.31	.35	.42	.42
9. Prepare for a career	.63	.41	.56	.59	.57	.66	.74	.56	.96	.65
10. Gain expertise	.53	.38	.55	.58	.64	.60	.55	.47	.74	.92
11. Develop human relations	.70	.58	.80	.78	.53	.32	.75	.74	.66	.65
12. Improve numerical ability	.19	.01	.11	.19	.33	.88	.25	.10	.47	.31
13. Value learning for its own sake	.52	.57	.61	.55	.47	.20	.50	.55	.43	.63
14. Understand cultural diversity	.49	.92	.76	.65	.44	.07	.48	.86	.34	.34
15. Improve basic skills	.88	.36	.47	.44	.35	.31	.66	.48	.59	.45

Note: The two sets of scales are not independent but contain items in common.

Table 61

Correlations of General College Goals and General Academic Orientations (N = 1134)

Scales	Scales		
	General education 1	Career 2	Non-directed 3
1. Develop creativity	.23	.03	.19
2. Increase self-understanding	.34	.15	.26
3. Improve speaking skills	.23	.14	.23
4. Improve reasoning skills	.38	.17	.20
5. Develop a life philosophy	.38	.15	.21
6. Understand the world around me	.39	.11	.16
7. Work for social causes	.30	.07	.16
8. Develop scientific inquiry skills	.25	.10	.14
9. Prepare for a career	.26	.27	.27
10. Gain expertise	.30	.19	.15
11. Develop human relations	.36	.17	.24
12. Improve numerical ability	.14	.17	.17
13. Value learning for its own sake	.39	.01	.09
14. Understand cultural diversity	.30	-.00	.09
15. Improve basic skills	.23	.13	.20

Students who have no clear academic goal for attending college (those who score high on the non-directed scale) nevertheless strongly endorse some specific General Academic Orientations. The highest correlations between college and course goals for these students are Increasing Self Understanding, Preparing for a Career, and Developing Human Relations. As might be expected, the weakest relationship is with Valuing Learning for its Own Sake. These correlations seem to indicate that these students are motivated least by intrinsic love of learning and more by the need for social relations and self-understanding.

The correlations in Tables 64 and 65 show relationships among measures we assume are closely related to students goals: Goal Attributes and Levels of Confidence as a student. The relationships among the five Goal Attributes are represented by mostly small and positive correlations. The strong negative relationships anticipated between preferring long-range and short-range goal time frames do not appear, nor do the expected negative relationships between being a self-confident scholar and an anxious student. There is, however, a strong positive relationship between Self-confidence as a scholar and preferring Long-range Goal Time Frames. To some extent these relationships are attenuated because students were responding for different academic subjects. The correlations are stronger when sub-samples of students from a single discipline are studied.

In Table 63 we show correlations of scores on the General Academic Orientation Scales with scores on the Goal Attribute and Levels of Confidence Scales. Here we see an expected positive correlation between long-range goals and several of the academic orientations, while the correlation between academic orientations and short-range goals is close to zero. Self-confidence as a scholar is also modestly associated in a positive way with most General Academic Orientations, while being an anxious student is less strongly related. Note that for Improving Numerical Ability, the pattern reverses. This seems to indicate that the levels of confidence and anxiety students feel about mathematics courses may be quite different than for other courses.

Table 62

Correlations of Goal Attribute Scales and Levels of Confidence Scales

	Scales						
Scales	1	2	3	4	5	6	7
1. Goal time frame (long-range)	1.00						
2. Goal time frame (short range)	-.01	1.00					
3. Goal clarity	.06	.35	1.00				
4. Goal source (expectations)	.38	.12	.13	1.00			
5. Goal source (self)	.23	.09	.17	.19	1.00		
6. Self-confident scholar	.52	-.03	.15	.37	.33	1.00	
7. Anxious student	-.00	.40	.34	.10	.04	-.04	1.00

Table 63

Correlations of Academic Orientation Scales with Goal Attributes and Levels of Confidence Scales

Academic Orientation Scales	Goal Attributes and Level of Confidence Scales						
	Long Range	Short Range	Clear	Expectations	Self	Confident	Anxious
1. Develop creativity	.26	.07	.10	.03	.06	.16	.11
2. Increase self-understanding	.44	.10	.15	.18	.09	.21	.17
3. Improve speaking skills	.33	.10	.16	.14	.11	.18	.19
4. Improve reasoning skills	.50	.03	.15	.27	.13	.34	.13
5. Develop a life philosophy	.44	.08	.13	.21	.09	.28	.17
6. Understand the world around me	.40	.04	.13	.22	.08	.28	.13
7. Work for social causes	.34	.03	.11	.11	.08	.22	.17
8. Develop scientific inquiry skills	.29	.02	.08	.18	.07	.20	.15
9. Prepare for a career	.41	.06	.16	.17	.08	.17	.20
10. Gain expertise	.57	-.01	.06	.26	.10	.31	.12
11. Develop human relations	.42	.08	.11	.22	.10	.21	.17
12. Improve numerical ability	.20	.06	.09	.08	.05	.06	.16
13. Value learning for its own sake	.50	-.03	.04	.23	.12	.39	.02
14. Understand cultural diversity	.28	.02	.10	.12	.08	.23	.06
15. Improve basic skills	.28	.09	.17	.18	.08	.10	.17

In Section 1 of this Manual we discussed a general conceptual framework that guided our development of the SGE, and illustrated it graphically in Figure 1 on Page 5. The correlations we have presented in this discussion will be examined further in the future for appropriate subgroups of students responding to a specific course. As the SGE data base grows, these explorations will help to test the strength of the hypothesized relationships in the conceptual framework.

5. Reliability

As mentioned earlier, most sections of the SGE produced stable factors, starting with the early pilot versions. Even with a few changes in items, the alpha reliabilities (measuring scale internal consistency) remained high and stable for the scales constructed from these items over the several pilot tests. In the section of the SGE that was the exception, entitled "Feelings about Studying in this Course (or Major)," we have retained five scales, some of which have very low reliabilities. Based on the factor analysis, these scales, which attempt to tap the origin and clarity of goals, could be consolidated as well into one scale with higher reliability. We have separated them because we hope to continue to distinguish between these potentially important goal attributes.

For the General Academic Orientation Scales, reliabilities were equally high for the 15 scales constructed from introductory course data and the nine scales constructed from major data (but not currently in use). The same was true for the Subject-Specific Scales.

When constructing the final sets of scales for the IR and CR versions, we removed a few items from selected scales throughout the SGE if the scale consistency would be increased and the scale shortened. For the reliability of SGE scales in the CR and IR versions, refer to Section 1, Table 4.

6. Discriminant Validity

We sought evidence of discriminant validity for the Subject-Specific Scales, basing our search on the assumption that majors in a field typically would endorse goal items on these scales more strongly than students studying the same subject in introductory courses. Such an expectation is supported by at least three effects: a selection effect may lead students with congruent goals to major in that field; an attrition effect may lead students with contrary goals to avoid the major; and a socialization effect may cause students' goals to become more like faculty members in that department through continued study. Our assumption proved to be correct. Not only were mean scores on the Subject-Specific Scales higher for students majoring in a field, but it was possible to separate students in different majors more distinctly based on their responses than was true for students in introductory courses. While we were willing to accept this difference between introductory students' responses and majors' responses as evidence of discriminant validity, the evidence thus far is based on cross-sectional data of groups that (in ways we discussed earlier) are not totally parallel. We await longitudinal data from field tests for confirmation and continued exploration of these relationships.

We also calculated mean scores on each SGE scale for students enrolled in the same subjects at each of the six colleges participating in Pilot Test II. Analyses of variance were used to discern if the scale responses differed for students enrolled in the same courses but in different colleges. Although some statistically significant differences occurred on particular scales, students in all six colleges hoped to achieve similar goals for most of the introductory

disciplines studied. This was true for English composition, history, psychology, Romance languages, mathematics, and business. There were a greater number of statistically significant variations among colleges for students studying literature, sociology, biology, and fine arts. In addition to differences in course goals on the Subject-Specific Scales, students in three of these subjects varied by college in their responses to the Universally Endorsed Scale and several of the General Academic Orientation Scales. Post hoc comparisons pinpointed the greatest number of differences as occurring between two colleges that differ greatly in control, orientation, geographic location, minority enrollment, and types of majors offered. These general differences, particularly in mission and student body, may account for differences in the orientations of the student bodies generally. One can imagine, for example, quite different goal orientations between students at a school noted for engineering studies and one noted for artistic studies. These differences reinforced our decision not to develop "norms" for the SGE goal scales. One of our colleagues, Leonard Baird, has suggested that these scales may best be thought of as having "local validity."

7. Concurrent Validity

For tests of concurrent validity, we selected three published instruments. These were the Need for Cognition (NFC) scale, which measures individuals' inclination to engage in and enjoy thinking (Cacioppo and Petty, 1982; Cacioppo, Petty and Kao, 1984); the LOGO II Student Survey that assesses students' motivation for "learning-oriented" and "grade-oriented" attitudes and behaviors (Elson, 1981); and the Goal Instability (GI) Scale, which identifies inhibition to work and lack of goal direction (Robbins and Patton, 1985). Based on the concepts they measured, there was reason to believe that these short scales should be related to various sets of items in the SGE, thereby contributing to evidence of its criterion-related validity.

In fall 1989, in addition to completing the SGE survey, half of the 1,182 students responding at the six colleges (N = 533) completed the LOGO II scale, while the other half (N = 557) completed the NFC and GI scales. In testing concurrent validity with these three scales for all students who completed pilot Version C of the SGE, we anticipated correlations somewhat lower than would typically be acceptable. The reason for this is that the SGE responses were based on a composite sample of students, reacting for ten different types of courses. Selected explorations with sub-samples did show substantially higher correlations when students responding for each type of introductory course were analyzed separately.

The pattern of expected correlations between SGE scales and the three validation scales demonstrated the SGE's concurrent validity. Essentially, the two LO scales of the LOGO II tap intrinsic motivation for learning, while the two GO scales tap extrinsic motivation based on grades. As expected, both the learning-oriented (LO) attitude and behavior scales correlated positively with the SGE scales tapping the college goal of wanting to acquire a general education (.32 and .33). (See Table 64 for complete pattern of correlations with the LOGO II scales.) From the list of 15 general academic orientation scales, we selected six as tapping varied intellectual orientations in coursework. As seen in Table 64, correlations of each of these scales with the LO scales were positive and ranged from .17 to .36.

Other expected correlations include those with the SGE scale measuring preference for long-range goal time frames for learning and feelings of being a self-confident scholar. Additionally, the two LOGO II learning-oriented scales correlated negatively with SGE scales tapping student preferences for short-range time frames for learning and with being an anxious student.

Table 64

Correlations of SGE Scales with Learning-oriented (LO) and Grade-oriented (GO) Scales

	LOGO II Scales			
	Attitudes		Behaviors	
Scale Category	LO	GO	LO	GO
College Goals				
Acquire general education	0.32	-0.08	0.33	0.04
Prepare for career	-0.06	0.17	-0.13	0.16
Non-directed	0.02	0.22	-0.05	0.29
General Academic Orientation				
Develop creativity	0.19	-0.01	0.19	0.11
Improve reasoning skills	0.19	-0.13	0.25	0.01
Develop a life philosophy	0.20	-0.10	0.26	0.02
Understand the world around me	0.20	-0.06	0.28	0.05
Work for social causes	0.17	-0.05	0.28	0.09
Value learning for its sake	0.28	-0.18	0.36	-0.09
Goal Attributes				
Goal time frame (long-range)	0.26	-0.20	0.32	-0.01
Goal time frame (short-range)	-0.12	0.35	-0.17	0.26
Goal clarity	0.09	0.18	-0.05	0.23
Goal source (expectations)	0.07	-0.13	0.06	-0.04
Goal source (self)	0.09	0.00	0.03	0.02
Levels of Confidence				
Self-confident scholar	0.32	-0.19	0.33	-0.01
Anxious student	-0.07	0.34	-0.17	0.37

In contrast, (also see Table 64), LOGO II grade-oriented scales correlated positively with holding college goals for career preparation and with not having a clear academic college goal at all (non-directed scale). For most of the six selected general academic orientation scales, correlations with the GO attitude and behavior scales were close to zero. This indicates that the SGE General Academic Orientation scales for courses are not closely related to grade-oriented attitudes and behavior. As expected the GO scales correlated negatively (but minimally) with long-range goals for learning and being a self-confident scholar. These same scales correlated positively with SGE scales, such as student preferences for short-range goals, clear goals and being an anxious student.

Consistent patterns also emerged between the SGE scales and Need for Cognition scales. The high NFC scale was expected to be positively correlated with SGE scales measuring the more intellectually-oriented college and course goals, as well as those that tapped long-range learning goals, and feelings of self-confidence as a scholar. The opposite correlation patterns were expected with the low NFC scale, including negative correlations of low NFC with the intellectually-oriented General Academic Orientation Scales. The expected results are shown in Table 65.

Students with high NFC were more interested in acquiring general education as a college goal, but were not necessarily different from others on their interest in career preparation. Similarly, low NFC students displayed less interest in acquiring a general education, but were not necessarily distinguished on their interest in career preparation. Non-directed students, those with no clear academic college goal, tended to have a low need for cognition. We found these results encouraging since they not only support the validity of the SGE scales for college goals but they support one of the premises from which we began our work. That is, student goals for college are multidimensional, rather than exclusively either learning-oriented or career-oriented.

Students scoring high on Need for Cognition also scored high on the six selected scales measuring varied intellectual orientations toward a specific course. Using single discipline sub-samples, these correlations between high NFC and the SGE Scale entitled "Learning for its own sake" ranged from .18 for mathematics courses to .57 for literature courses. Similarly, correlations between high NFC and the SGE Scale "Understand the World Around Me," ranged from .16 for mathematics to .37 in history. The correlations of these intellectually-focused General Academic Orientation scales with the low NFC scales were close to zero as expected.

Among the goal attributes, the high NFC scale correlated positively with SGE scales tapping long-range goals for learning, and feelings of confidence as a scholar. Meanwhile, the opposite correlation patterns were expected and found with the low NFC scale.

For the Goal Instability (GI) Scale a high score indicates unstable goals. The non-directed college goal scale from the SGE correlated positively with the GI scale (See Table 66 for these results). As expected, the relationship between GI scores and scores on the selected SGE General Academic Orientation scales were close to zero.

The expected correlations between the GI scale and the five SGE goal attributes scales were confirmed. In particular, the correlations with SGE preference for short-range goals and long-range goals for learning were in the expected directions. Also, the anxious, student tended to have unstable goals when compared with the self-confident scholar.

In summary, the results of our concurrent validity testing increase our confidence in the utility of the SGE. The concurrent validity analysis is reported in more detail in an article which has been submitted for publication (Stark, Bentley, Lowther and Shaw, 1990).

Table 65

Correlations of SGE Scales with Need for Cognition Scales

Scale Category	Need for Cognition	
	High	Low
College Goals		
Acquire general education	0.31	-0.13
Prepare for career	0.07	0.07
Non-directed	-0.04	0.19
General Academic Orientation		
Develop creativity	0.12	0.07
Improve reasoning skills	0.29	0.03
Develop a life philosophy	0.23	0.09
Understand the world around me	0.26	0.04
Work for social causes	0.20	0.06
Value learning for its own sake	0.36	-0.15
Goal Attributes		
Goal time frame (long-range)	0.39	-0.19
Goal time frame (short-range)	-0.23	0.35
Goal clarity	-0.02	0.25
Goal source (expectations)	0.22	-0.09
Goal source (self)	0.27	-0.09
Levels of Confidence		
Self-Confident Scholar	0.48	-0.25
Anxious student	-0.12	0.38

Table 66

Correlations of SGE Scales with Goal Instability Scale

Scale Category	Goal Instability Scale
College Goals	
Acquire general education	-0.05
Prepare for career	-0.03
Non-directed	0.27
General Academic Orientation	
Develop creativity	0.10
Improve reasoning skills	0.02
Develop a life philosophy	0.08
Understand the world around me	-0.00
Work for social causes	0.03
Value learning for its own sake	-0.06
Goal Attributes	
Goal time frame (long-range)	-0.15
Goal time frame (short-range)	0.29
Goal clarity	0.17
Goal source (expectations)	-0.19
Goal source (self)	-0.15
Levels of Confidence	
Self-Confident Scholar	-0.21
Anxious student	0.40

8. Gender Comparisons

Although many subgroup comparisons could be undertaken with the SGE Scales, it seemed most basic to report a comparison of the goals of men and women students. The summary below is based on simple t-tests and does not take into account differences in age or other related variables.

In general, women were less likely than men to score high on the "nondirected" scale of college goals. However, they endorsed most General Academic Orientation Scales less strongly. Their endorsements were significantly less strong for Developing Creativity, Increasing Self-Understanding, Improving Speaking Skills Preparing for a Career, Improving Numerical Ability, and Improving Basic Skills.

In terms of Goal Attributes and related measures, women students were more likely to prefer more short range goal time frames, and more likely to say they would meet the expectations of others. Women were also more likely to be anxious students than men.

Additional comparisons of student sub-groups will be reported at a later date.

SECTION IV. THE SGE INVENTORIES

Institutional Research Versions (IR-1, IR-2, IR-M)

Faculty Perspective Version

NCRIPTAL

NATIONAL CENTER FOR RESEARCH TO IMPROVE POSTSECONDARY TEACHING and LEARNING

Student Goals Exploration

Version IR-1
(to be completed early in academic term)

This questionnaire is designed to help researchers better understand the academic goals of college students. Please respond to this questionnaire within the next day or two. Read the questions and answer them fairly rapidly according to your own views. ***There are no right or wrong answers. This is not a test and your participation is voluntary.***

You may be asked to complete a second, related questionnaire in a few months. Your student ID number is requested to match your two responses. Your college will provide instructions on how to return the completed survey and may supply some special items to fill blank spaces in the survey.

Examples of ways to mark circles (any of the following are acceptable):

Thank you in advance for taking the time to complete this survey.

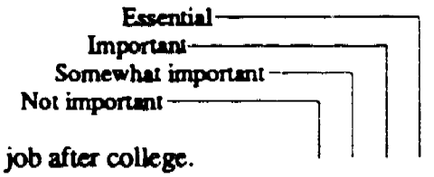
The SGE was developed by the Research Program on Curriculum: Influences and Impacts at the National Center for Research to Improve Postsecondary Teaching and Learning, 2400 School of Education Building, University of Michigan, Ann Arbor, Michigan 48109-1259. The Center is funded by the University of Michigan and the U. S. Department of Education's Office of Educational Research and Improvement under OERI grant number G008690010.

© 1990 by the Regents of the University of Michigan for the
National Center for Research to Improve Postsecondary Teaching and Learning

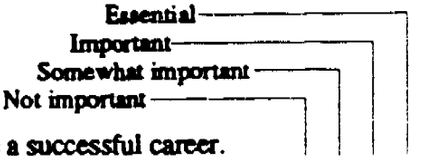
Goals in Attending College

We are interested in learning about your goals for attending college. We also want to know whether you think your college teachers agree with your goals.

As you read each possible reason below for attending college, mark a circle on the first scale to show how important each reason is to **You**. Then read the goal again and mark a circle on the second scale to give your best estimate of how important that goal for you is to **Your College Teachers**. If you aren't sure how your college teachers feel, don't skip the question; just give your best guess.



1. To get a better job after college.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④
2. To gain a general education.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④
3. To gain respect as an expert at something.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④
4. To improve study skills and reading habits.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④
5. To prepare for a life of meaningful participation in society.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④
6. To get away from home.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④
7. To become a more cultured person.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④
8. To provide something to do.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④
9. To be able to make more money.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④



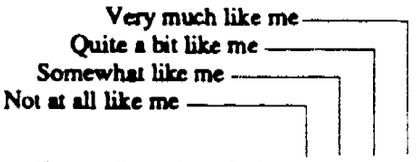
10. To be able to have a successful career.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④
11. To understand how knowledge is developed.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④
12. To learn more about interesting things.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④
13. To prepare for graduate or professional school.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④
14. To meet family expectations.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④
15. To be with friends.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④
16. To become an informed citizen and voter.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④
17. To develop creative talents.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④
18. To prepare for a life of service to society.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④
19. To improve one's social position.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

20.-25.

Please respond to any goal statements provided by your college or instructor on the separate answer sheet supplied. Be sure to put the answers in the spaces for College Goals, Items 20-25. If no items are supplied, proceed to the next section.

Goals in Attending College (continued)

Please respond to the statements below. If you feel the item is not applicable to you, then choose "Not at all like me."



1. My reason for attending college is to help make the world a better place for all of us. By studying content that reflects real life situations, I can learn to adapt to a changing society and to intervene where necessary. ① ② ③ ④
2. My main purpose in college is to learn how to think effectively. I need to learn general intellectual skills, such as observing, classifying, analyzing, and synthesizing in orde. to gain intellectual autonomy. ① ② ③ ④
3. I believe that my instructors know the goals, objectives, course procedures, and expectations that are suitable for me. My success as a student depends on the degree to which I achieve the objectives established by my instructors. ① ② ③ ④
4. I am in college primarily to achieve my vocational goals. My education should provide me with knowledge and skills that enable me to earn a living and contribute to society. ① ② ③ ④
5. My education should involve me in a series of personally enriching experiences. I desire an education that allows me to discover myself as a unique individual and thus acquire personal freedom. ① ② ③ ④
6. In my education I want to understand the great products and discoveries of the human mind. Thus, I want to learn about the major ideas and concepts that important thinkers have illuminated, increasing both the breadth and depth of my knowledge. ① ② ③ ④
7. For me, the development of values during college is as important as learning subject knowledge. My education should help me clarify my beliefs and values and thus develop commitment and dedication to guide my life. ① ② ③ ④

Goals in Taking This Course

We are interested in learning about the goals that students hope to achieve when they take certain courses. Please identify the course for which you received this survey. Then please keep that course and only that course in mind as you answer the questions in this part. Answer as well as you can whether you hope to make progress toward each goal in your particular course. Don't be concerned if some of the items seem not to fit your course very well. If an item does not apply to your course, choose "Not important."

Course for which you are completing this survey:

Title of course: _____

_____

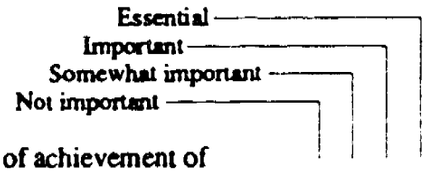
Course number: _____

Department offering course: _____

If any of the following were the main reasons you took this course, mark those reasons before proceeding.

① Was required
② Fit my schedule
③ Best among limited options

On the scale provided at the right indicate how important to you is each of the following goals you might achieve by taking the course you have just described. Mark the circles for the proper responses.



1. To build a record of achievement of which I can be proud. ① ② ③ ④
2. To discover new ways of seeing and doing things. ① ② ③ ④
3. To enjoy learning for learning's sake. ① ② ③ ④
4. To weigh alternatives when making decisions. ① ② ③ ④
5. To see how different facts and ideas fit together. ① ② ③ ④
6. To improve my study skills. ① ② ③ ④
7. To learn to get along with different kinds of people. ① ② ③ ④
8. To recognize broad principles when observing specific events. ① ② ③ ④
9. To try to find the basic structure in this field of knowledge. ① ② ③ ④
10. To improve my reasoning ability--to recognize assumptions, make logical inferences, and reach correct conclusions. ① ② ③ ④
11. To understand how scholars gain new knowledge or understanding. ① ② ③ ④

Essential
Important
Somewhat important
Not important

12. To prepare for a life of service to others. ① ② ③ ④
13. To develop friendships and loyalties of lasting value. ① ② ③ ④
14. To become aware of different philosophies, cultures, and ways of life. ① ② ③ ④

REMEMBER TO FOCUS ON THE SPECIFIC COURSE FOR WHICH YOU RECEIVED THIS SURVEY.

15. To learn appropriate social skills for different situations. ① ② ③ ④
16. To develop the ability to work well with others in a group. ① ② ③ ④
17. To be able to discuss current political and social issues. ① ② ③ ④
18. To develop a broader vision of the world. ① ② ③ ④
19. To learn to organize my thoughts. ① ② ③ ④
20. To develop personal independence. ① ② ③ ④
21. To learn skills that enrich my daily life. ① ② ③ ④
22. To listen effectively to what others are saying. ① ② ③ ④
23. To develop the capacity to change as times change. ① ② ③ ④
24. To develop respect for and sensitivity to the views of others. ① ② ③ ④
25. To improve my writing abilities--to develop clear, correct, and effective communication. ① ② ③ ④
26. To become better informed as a citizen. ① ② ③ ④
27. To develop a philosophy of life. ① ② ③ ④
28. To understand events that people have tried to explain. ① ② ③ ④
29. To learn how things change over time. ① ② ③ ④
30. To develop the ability to see relationships, similarities, and differences among ideas. ① ② ③ ④
31. To draw my own conclusions. ① ② ③ ④
32. To appreciate individuality and independence of thought and action. ① ② ③ ④
33. To find problems and solutions in literature and film that apply to my own life. ① ② ③ ④
34. To understand how humans have learned to cope with nature. ① ② ③ ④
35. To become more broadminded. ① ② ③ ④
36. To weigh and question the opinions of experts and authorities. ① ② ③ ④

Essential
Important
Somewhat important
Not important

37. To understand the world around me. ① ② ③ ④
38. To be able to make ethical and moral choices. ① ② ③ ④
39. To predict specific events from broad principles. ① ② ③ ④
40. To understand the way researchers investigate questions. ① ② ③ ④
41. To increase my self-confidence or sense of self-worth. ① ② ③ ④
42. To use my imagination. ① ② ③ ④
43. To develop a capacity for self-evaluation. ① ② ③ ④
44. To help others who need my skills or services. ① ② ③ ④
45. To understand current issues in this field. ① ② ③ ④
46. To understand specific facts in this field. ① ② ③ ④
47. To learn things that will stimulate me to learn more on my own. ① ② ③ ④
48. To learn how to work for important causes. ① ② ③ ④
49. To make effective decisions. ① ② ③ ④
50. To be able to debate both sides of an issue effectively. ① ② ③ ④
51. To gain information that will be useful after college in my family life. ① ② ③ ④
52. To interpret evidence. ① ② ③ ④
53. To understand the complexity of the world. ① ② ③ ④
54. To achieve social status or prestige. ① ② ③ ④
55. To be able to perform credibly in my chosen occupation. ① ② ③ ④
56. To learn to accept challenges. ① ② ③ ④
57. To meet requirements necessary to enter professional or graduate school. ① ② ③ ④
58. To gain information directly useful in my current or future career. ① ② ③ ④
59. To learn to solve problems. ① ② ③ ④
60. To gain a global or international perspective. ① ② ③ ④
61. To use the skills and abilities I have more effectively. ① ② ③ ④
62. To improve my reading skills. ① ② ③ ④
63. To improve my skills in communicating by electronic means such as computers. ① ② ③ ④

Essential
Important
Somewhat important
Not important

64. To become a knowledgeable consumer. ① ② ③ ④
65. To develop my creative talents. ① ② ③ ④
66. To enjoy works of art. ① ② ③ ④

(Don't forget to think only about this course.)

67. To develop closer relationships with others. ① ② ③ ④
68. To help secure world peace. ① ② ③ ④
69. To understand the causes of war and peace. ① ② ③ ④
70. To try to answer unsolved questions. ① ② ③ ④
71. To understand scientific principles and concepts. ① ② ③ ④
72. To learn how people have solved social problems. ① ② ③ ④
73. To have fun. ① ② ③ ④
74. To achieve job security. ① ② ③ ④
75. To develop leisure time interests. ① ② ③ ④
76. To help improve gender and racial equality. ① ② ③ ④
77. To enjoy film. ① ② ③ ④
78. To learn to interpret numerical data. ① ② ③ ④
79. To create a composition, artistic work, or invention that no one has ever created before. ① ② ③ ④
80. To contribute to the improvement of human welfare. ① ② ③ ④
81. To establish important contacts for the future. ① ② ③ ④
82. To promote international harmony. ① ② ③ ④
83. To increase my power to persuade others. ① ② ③ ④
84. To improve my speaking abilities. ① ② ③ ④
85. To learn how to use library facilities and other informational sources. ① ② ③ ④
86. To improve my ability to handle stress. ① ② ③ ④
87. To eventually become an expert in my chosen field. ① ② ③ ④
88. To investigate the unknown. ① ② ③ ④
89. To establish standards of behavior. ① ② ③ ④
90. To become aware of the consequences of new applications in science and technology. ① ② ③ ④
91. To understand my own abilities and limitations. ① ② ③ ④

Essential
Important
Somewhat important
Not important

92. To develop keener awareness of my environment. ① ② ③ ④
93. To succeed in business. ① ② ③ ④
94. To develop my leadership abilities. ① ② ③ ④
95. To acquire greater decision-making responsibility in my job. ① ② ③ ④
96. To understand how culture has developed. ① ② ③ ④
97. To learn more about science. ① ② ③ ④
98. To learn how people govern themselves. ① ② ③ ④
99. To become a happy person. ① ② ③ ④
100. To develop a personal philosophy related to my work. ① ② ③ ④
101. To understand how science has affected human life. ① ② ③ ④
102. To be able to write an excellent technical report. ① ② ③ ④
103. To identify an appropriate career. ① ② ③ ④
104. To improve my mathematical skills. ① ② ③ ④
105. To learn how to acquire power. ① ② ③ ④
106. To explore the world of ideas. ① ② ③ ④
107. To overcome hesitancy about expressing my views in public. ① ② ③ ④
108. To understand my own interests. ① ② ③ ④
109. To improve my self-confidence in mathematics. ① ② ③ ④
110. To enjoy music. ① ② ③ ④

111.-130.

Please respond to any goal statements provided by your college or instructor on the separate answer sheet supplied. Be sure to put the answers in the spaces for Course Goals, Items 111-130. If no items are supplied, proceed to the next section.

Feelings About Studying in This Course

Continue to keep in mind the course for which you are completing this survey. As you prepare to study or complete assignments in this course, which statements best describe your thoughts and feelings? Use the scale at the right to mark the extent to which each thought is like your own.

Very much like me
Quite a bit like me
Somewhat like me
Not at all like me

1. In the long run, study in this field will help me to get ahead in the world. ① ② ③ ④
2. When I complete a learning activity I usually get a sense of satisfaction. ① ② ③ ④
3. In this course, setting long-range goals is important. ① ② ③ ④
4. I complete daily learning tasks primarily because I enjoy them. ① ② ③ ④
5. I should complete what is expected of a person of my capability. ① ② ③ ④
6. I would work hard to get good grades even if I didn't like the coursework. ① ② ③ ④
7. I feel obliged to work hard only if I can see the importance of the task. ① ② ③ ④
8. I learn best when my instructor makes it clear what the goals of each assignment are. ① ② ③ ④
9. I prefer to set short-range goals so that I can get a sense of satisfaction and achievement. ① ② ③ ④
10. I believe I should set my own goals rather than accept someone else's goals for me. ① ② ③ ④
11. I would rather tackle easy problems than difficult ones. ① ② ③ ④
12. Even when study materials are dull and uninteresting, I believe I should keep working until I am finished. ① ② ③ ④
13. I learn best if I see a direct relation between my assignments and my long range goals. ① ② ③ ④
14. If I sense I can't achieve a goal, I'd rather set one that is easier to reach. ① ② ③ ④
15. I find learning in this field is very exciting and challenging. ① ② ③ ④
16. I like to plan my learning activities over a long time frame so they will fit together. ① ② ③ ④
17. I seldom need to seek advice about what my goals should be. ① ② ③ ④
18. Deciding what topics I study should be my own choice rather than my instructor's choice. ① ② ③ ④

Expectations/Study Skills--This Course

Please respond to the following statements. Keep in mind your expectations about the particular course for which you received the survey. If you feel the item is not applicable to you in this course, then choose "Not at all like me."

Very much like me
Quite a bit like me
Somewhat like me
Not at all like me

1. When I take tests I think of the consequences of failing. ① ② ③ ④
2. I have difficulty identifying the most important points in my reading. ① ② ③ ④
3. I seldom ask my instructor to clarify concepts that I don't understand well. ① ② ③ ④
4. When I take a test I think about items on other parts of the test I can't answer. ① ② ③ ④
5. When I study new material, I often skim it to see how it is organized. ① ② ③ ④
6. When I study for exams I integrate information from different sources, such as lectures, reading, and discussions. ① ② ③ ④
7. When reading I try to relate the material to what I already know. ① ② ③ ④
8. I begin with course material but develop my own ideas about the topics. ① ② ③ ④
9. I believe I will receive an excellent grade. ① ② ③ ④
10. When I study a topic, I try to make everything fit together. ① ② ③ ④
11. I am confident that I can learn the basic concepts. ① ② ③ ④
12. I'm certain that my own ability will result in my being successful. ① ② ③ ④
13. When having difficulty recalling something, I make an effort to recall something else that might be related to it. ① ② ③ ④
14. I often find that I read assignments but don't know what they are all about. ① ② ③ ④
15. I prefer learning activities that are challenging or arouse my curiosity, even if they are difficult. ① ② ③ ④
16. It is sometimes hard for me to go on with my work if I am not encouraged. ① ② ③ ④
17. When coursework is difficult, I either give up or study only the easy parts. ① ② ③ ④
18. If I want to get a good grade, it depends on what I do. ① ② ③ ④

Student Information

Please supply the information in the space provided or mark the circle corresponding to your chosen response.

1. Your student number: ___ _____

2. Name of your college or university:

   _____

3. Your age last January 1: _____

4. Your sex:

   ① Male ② Female

5. Your ethnic background (optional):

   ① White, non-Hispanic
   ② Black, non-Hispanic
   ③ Hispanic
   ④ Native American/Alaskan native
   ⑤ Asian/Pacific Islander

6. Your year in college:

   ① Freshman
   ② Sophomore
   ③ Junior
   ④ Senior

7. Year you graduated from high school: _____

8. Is this the first college you have attended?

   ① Yes ② No

9. What is your expected major in college?

   _____

10. Have you formally indicated this major to the college?

    ① Yes ② No

11. How certain are you that this is the major you desire?

    ① Extremely certain
    ② Quite certain
    ③ Somewhat certain
    ④ Not at all certain

12. What is the highest college degree you plan to acquire?

    _____

13. What occupation or profession do you expect to pursue?

    _____

14. How certain are you that this is the occupation or profession you desire?

    ① Extremely certain
    ② Quite certain
    ③ Somewhat certain
    ④ Not at all certain

15. When you entered college how well prepared did you feel you were for college study?

    ① Extremely well prepared
    ② Quite prepared
    ③ Somewhat prepared
    ④ Not at all prepared

16. How many courses are you taking this term? _____ courses

17. During the academic term, how many hours per week are you employed for pay? _____ hours

18. During the academic term, on the average, how many hours do you study per week? _____ hours

19. What was your approximate overall grade point average in high school?

    ① D
    ② C-
    ③ C
    ④ C+ or B-
    ⑤ B
    ⑥ B+ or A-
    ⑦ A

20. Do you live within walking distance of the campus during academic terms?

    ① Yes ② No

21. Did your father attend college?

    ① Yes ② No

22. Did your father graduate from college?

    ① Yes ② No

23. Did your mother attend college?

    ① Yes ② No

24. Did your mother graduate from college?

    ① Yes ② No

Student Information (continued)

25-26. Which of the following best describes the occupation of your father and/or mother?

25. Father
26. Mother

① ① **Clerical/Sales** - such as a bank teller, bookkeeper, secretary, typist, mail carrier, salesperson, sales clerk, advertising or insurance agent
② ② **Crafts/Technical** - such as a baker, automobile mechanic, machinist, painter, plumber, draftsperson, medical or dental technician, or computer programmer
③ ③ **Farmer/Farm Manager**
④ ④ **Homemaker**
⑤ ⑤ **Laborer** - such as a construction worker, car washer, sanitary worker, or farm laborer
⑥ ⑥ **Manager/Administrator** - such as a sales manager, office manager, school administrator, buyer, restaurant manager, or government official
⑦ ⑦ **Service Worker** - such as a police officer, fire fighter, hair stylist, practical nurse, waiter, or private household worker
⑧ ⑧ **Professional** - such as an accountant, artist, member of the clergy, dentist, physician, registered nurse, engineer, lawyer, librarian, teacher, writer, scientist, social worker, or actor
⑨ ⑨ **Proprietor or Owner** - such as an owner of a small business, contractor, or restaurant owner
⑩ ⑩ **Operative** - such as a meat cutter, assembler, machine operator, welder, or taxicab, bus, or truck driver
⑪ ⑪ **Military** - such as a career officer, or enlisted person in the armed services

27. All in all, how satisfied are you with the academic aspects of college?

① Very satisfied
② Quite satisfied
③ Somewhat satisfied
④ Not satisfied

28. All in all, how satisfied are you with the non-academic aspects of college?

① Very satisfied
② Quite satisfied
③ Somewhat satisfied
④ Not satisfied

29. How often, if ever, do you think about dropping out of college?

① Never have thought of it
② Very seldom
③ Occasionally
④ Frequently

30. Which of the following is most influential in causing you to avoid taking a course? (Mark only one.)

① Not useful in my future career
② Lots of work
③ Teacher poor
④ No challenge - course too easy
⑤ Might fail - course too hard

31. Which of the following will be most influential in your choice of career? (Mark only one.)

① My parents value the career highly.
② The career will allow me leisure time.
③ The career pays well.
④ The career is challenging.
⑤ I am sure I can succeed in the career.

32.-40.

Please respond to any student information questions provided by your college or instructor on the separate sheet supplied. Be sure to put the answers in the spaces for Student Information, Items 32-40. If no items are supplied, proceed to the Comments section below.

Comments

(Use this space to make any comments you may wish to share.)

Thank you for taking the time to complete this survey.

College Goals (Items 20-25)

Please respond to any goal statements provided by your college or instructor on this answer sheet. If you feel the item is not applicable to you, then choose "Not important." If no items are supplied, proceed to the next section.

Essential
Important
Somewhat important
Not important

20. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

21. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

22. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

23. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

24. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

25. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

Course Goals (Items 111-130)

Please respond to any goal statements provided by your college or instructor on this answer sheet. If you feel the item is not applicable to you, then choose "Not important." If no items are supplied, proceed to the next section.

Essential
Important
Somewhat important
Not important

111. _____ ① ② ③ ④
112. _____ ① ② ③ ④
113. _____ ① ② ③ ④
114. _____ ① ② ③ ④

Essential
Important
Somewhat important
Not important

115. _____ ① ② ③ ④
116. _____ ① ② ③ ④
117. _____ ① ② ③ ④
118. _____ ① ② ③ ④
119. _____ ① ② ③ ④
120. _____ ① ② ③ ④
121. _____ ① ② ③ ④
122. _____ ① ② ③ ④
123. _____ ① ② ③ ④
124. _____ ① ② ③ ④
125. _____ ① ② ③ ④
126. _____ ① ② ③ ④
127. _____ ① ② ③ ④
128. _____ ① ② ③ ④
129. _____ ① ② ③ ④
130. _____ ① ② ③ ④

Student Information (Items 32-40)

Please respond to any student information questions provided by your college or instructor on this answer sheet. Enter your response in the space provided below or follow further instructions provided by your college or instructor. If no items are supplied, proceed to the next section.

32. _____ ① ② ③ ④ ⑤ ⑥
33. _____ ① ② ③ ④ ⑤ ⑥
34. _____ ① ② ③ ④ ⑤ ⑥
35. _____ ① ② ③ ④ ⑤ ⑥
36. _____ ① ② ③ ④ ⑤ ⑥
37. _____ ① ② ③ ④ ⑤ ⑥
38. _____ ① ② ③ ④ ⑤ ⑥
39. _____ ① ② ③ ④ ⑤ ⑥
40. _____ ① ② ③ ④ ⑤ ⑥

Student Goals Exploration

Version IR-2
(to be completed late in academic term)

This questionnaire is designed to help researchers better understand the academic goals of college students. Please respond to this questionnaire within the next day or two. Read the questions and answer them fairly rapidly according to your own views. ***There are no right or wrong answers. This is not a test and your participation is voluntary.***

You probably were asked to complete a related questionnaire a few weeks ago. Your student ID number is requested to match your two responses. Your college will provide instructions on how to return the completed survey and may supply some special items to fill blank spaces in the survey.

Examples of ways to mark circles (any of the following are acceptable):

Thank you in advance for taking the time to complete this survey.

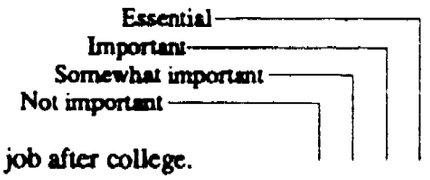
The SGE was developed by the Research Program on Curriculum: Influences and Impacts at the National Center for Research to Improve Postsecondary Teaching and Learning, 2400 School of Education Building, University of Michigan, Ann Arbor, Michigan 48109-1259. The Center is funded by the University of Michigan and the U. S. Department of Education's Office of Educational Research and Improvement under OERI grant number G008690010.

© 1990 by the Regents of the University of Michigan for the
National Center for Research to Improve Postsecondary Teaching and Learning

Goals in Attending College

We are interested in learning about your goals for attending college. We also want to know whether you think your college teachers agree with your goals.

As you read each possible reason below for attending college, mark a circle on the first scale to show how important each reason is to **You**. Then read the goal again and mark a circle on the second scale to give your best estimate of how important that goal for you is to **Your College Teachers**. If you aren't sure how your college teachers feel, don't skip the question; just give your best guess.



1. To get a better job after college.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④

2. To gain a general education.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④

3. To gain respect as an expert at something.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④

4. To improve study skills and reading habits.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④

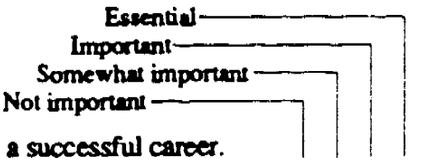
5. To prepare for a life of meaningful participation in society.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④

6. To get away from home.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④

7. To become a more cultured person.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④

8. To provide something to do.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④

9. To be able to make more money.
   You: ① ② ③ ④
   Your College Teachers: ① ② ③ ④



10. To be able to have a successful career.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

11. To understand how knowledge is developed.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

12. To learn more about interesting things.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

13. To prepare for graduate or professional school.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

14. To meet family expectations.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

15. To be with friends.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

16. To become an informed citizen and voter.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

17. To develop creative talents.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

18. To prepare for a life of service to society.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

19. To improve one's social position.
    You: ① ② ③ ④
    Your College Teachers: ① ② ③ ④

20.-25.

Please respond to any goal statements provided by your college or instructor on the separate answer sheet supplied. Be sure to put the answers in the spaces for College Goals, Items 20-25. If no items are supplied, proceed to the next section.

Goals in Attending College (continued)

Please respond to the statements below. If you feel the item is not applicable to you, then choose "Not at all like me."

Very much like me
Quite a bit like me
Somewhat like me
Not at all like me

1. My reason for attending college is to help make the world a better place for all of us. By studying content that reflects real life situations, I can learn to adapt to a changing society and to intervene where necessary ① ② ③ ④
2. My main purpose in college is to learn how to think effectively. I need to learn general intellectual skills, such as observing, classifying, analyzing, and synthesizing in order to gain intellectual autonomy. ① ② ③ ④
3. I believe that my instructors know the goals, objectives, course procedures, and expectations that are suitable for me. My success as a student depends on the degree to which I achieve the objectives established by my instructors. ① ② ③ ④
4. I am in college primarily to achieve my vocational goals. My education should provide me with knowledge and skills that enable me to earn a living and contribute to society. ① ② ③ ④
5. My education should involve me in a series of personally enriching experiences. I desire an education that allows me to discover myself as a unique individual and thus acquire personal freedom. ① ② ③ ④
6. In my education I want to understand the great products and discoveries of the human mind. Thus, I want to learn about the major ideas and concepts that important thinkers have illuminated, increasing both the breadth and depth of my knowledge. ① ② ③ ④
7. For me, the development of values during college is as important as learning subject knowledge. My education should help me clarify my beliefs and values and thus develop commitment and dedication to guide my life. ① ② ③ ④

Goals in Taking This Course

We are interested in learning about the goals that students hope to achieve when they take certain courses. Please identify the course for which you received this survey. Then please keep that course **and only that course** in mind as you answer the questions in this part. Answer as well as you can whether you hoped to make progress toward each goal in your particular course. Don't be concerned if some of the items seem not to fit your course very well. If an item does not apply to your course, choose "Not important."

Course for which you are completing this survey:

Title of course: _____

_____

Course number: _____

Department offering course: _____

If any of the following were the main reasons you took this course, mark those reasons before proceeding.

① Was required
② Fit my schedule
③ Best among limited options

On the scale provided at the right indicate how important to you is each of the following goals you might achieve by taking the course you have just described. Mark the circles for the proper responses.

Essential
Important
Somewhat important
Not important

1. To build a record of achievement of which I can be proud. ① ② ③ ④
2. To discover new ways of seeing and doing things. ① ② ③ ④
3. To enjoy learning for learning's sake. ① ② ③ ④
4. To weigh alternatives when making decisions. ① ② ③ ④
5. To see how different facts and ideas fit together. ① ② ③ ④
6. To improve my study skills. ① ② ③ ④
7. To learn to get along with different kinds of people. ① ② ③ ④
8. To recognize broad principles when observing specific events. ① ② ③ ④
9. To try to find the basic structure in this field of knowledge. ① ② ③ ④
10. To improve my reasoning ability--to recognize assumptions, make logical inferences, and reach correct conclusions. ① ② ③ ④
11. To understand how scholars gain new knowledge or understanding. ① ② ③ ④

Essential
Important
Somewhat important
Not important

12. To prepare for a life of service to others. ① ② ③ ④
13. To develop friendships and loyalties of lasting value. ① ② ③ ④
14. To become aware of different philosophies, cultures, and ways of life. ① ② ③ ④

REMEMBER TO FOCUS ON THE SPECIFIC COURSE FOR WHICH YOU RECEIVED THIS SURVEY.

15. To learn appropriate social skills for different situations. ① ② ③ ④
16. To develop the ability to work well with others in a group. ① ② ③ ④
17. To be able to discuss current political and social issues. ① ② ③ ④
18. To develop a broader vision of the world. ① ② ③ ④
19. To learn to organize my thoughts. ① ② ③ ④
20. To develop personal independence. ① ② ③ ④
21. To learn skills that enrich my daily life. ① ② ③ ④
22. To listen effectively to what others are saying. ① ② ③ ④
23. To develop the capacity to change as times change. ① ② ③ ④
24. To develop respect for and sensitivity to the views of others. ① ② ③ ④
25. To improve my writing abilities--to develop clear, correct, and effective communication. ① ② ③ ④
26. To become better informed as a citizen. ① ② ③ ④
27. To develop a philosophy of life. ① ② ③ ④
28. To understand events that people have tried to explain. ① ② ③ ④
29. To learn how things change over time. ① ② ③ ④
30. To develop the ability to see relationships, similarities, and differences among ideas. ① ② ③ ④
31. To draw my own conclusions. ① ② ③ ④
32. To appreciate individuality and independence of thought and action. ① ② ③ ④
33. To find problems and solutions in literature and film that apply to my own life. ① ② ③ ④
34. To understand how humans have learned to cope with nature. ① ② ③ ④
35. To become more broadminded. ① ② ③ ④
36. To weigh and question the opinions of experts and authorities. ① ② ③ ④

Essential
Important
Somewhat important
Not important

37. To understand the world around me. ① ② ③ ④
38. To be able to make ethical and moral choices. ① ② ③ ④
39. To predict specific events from broad principles. ① ② ③ ④
40. To understand the way researchers investigate questions. ① ② ③ ④
41. To increase my self-confidence or sense of self-worth. ① ② ③ ④
42. To use my imagination. ① ② ③ ④
43. To develop a capacity for self-evaluation. ① ② ③ ④
44. To help others who need my skills or services. ① ② ③ ④
45. To understand current issues in this field. ① ② ③ ④
46. To understand specific facts in this field. ① ② ③ ④
47. To learn things that will stimulate me to learn more on my own. ① ② ③ ④
48. To learn how to work for important causes. ① ② ③ ④
49. To make effective decisions. ① ② ③ ④
50. To be able to debate both sides of an issue effectively. ① ② ③ ④
51. To gain information that will be useful after college in my family life. ① ② ③ ④
52. To interpret evidence. ① ② ③ ④
53. To understand the complexity of the world. ① ② ③ ④
54. To achieve social status or prestige. ① ② ③ ④
55. To be able to perform credibly in my chosen occupation. ① ② ③ ④
56. To learn to accept challenges. ① ② ③ ④
57. To meet requirements necessary to enter professional or graduate school. ① ② ③ ④
58. To gain information directly useful in my current or future career. ① ② ③ ④
59. To learn to solve problems. ① ② ③ ④
60. To gain a global or international perspective. ① ② ③ ④
61. To use the skills and abilities I have more effectively. ① ② ③ ④
62. To improve my reading skills. ① ② ③ ④
63. To improve my skills in communicating by electronic means such as computers. ① ② ③ ④

Essential
Important
Somewhat important
Not important

64. To become a knowledgeable consumer. ① ② ③ ④
65. To develop my creative talents. ① ② ③ ④
66. To enjoy works of art. ① ② ③ ④

(Don't forget to think only about this course.)

67. To develop closer relationships with others. ① ② ③ ④
68. To help secure world peace. ① ② ③ ④
69. To understand the causes of war and peace. ① ② ③ ④
70. To try to answer unsolved questions. ① ② ③ ④
71. To understand scientific principles and concepts. ① ② ③ ④
72. To learn how people have solved social problems. ① ② ③ ④
73. To have fun. ① ② ③ ④
74. To achieve job security. ① ② ③ ④
75. To develop leisure time interests. ① ② ③ ④
76. To help improve gender and racial equality. ① ② ③ ④
77. To enjoy [illegible]. ① ② ③ ④
78. To learn to interpret numerical data. ① ② ③ ④
79. To create a composition, artistic work, or invention that no one has ever created before. ① ② ③ ④
80. To contribute to the improvement of human welfare. ① ② ③ ④
81. To establish important contacts for the future. ① ② ③ ④
82. To promote international harmony. ① ② ③ ④
83. To increase my power to persuade others. ① ② ③ ④
84. To improve my speaking abilities. ① ② ③ ④
85. To learn how to use library facilities and other informational sources. ① ② ③ ④
86. To improve my ability to handle stress. ① ② ③ ④
87. To eventually become an expert in my chosen field. ① ② ③ ④
88. To investigate the unknown. ① ② ③ ④
89. To establish standards of behavior. ① ② ③ ④
90. To become aware of the consequences of new applications in science and technology. ① ② ③ ④
91. To understand my own abilities and limitations. ① ② ③ ④

Essential
Important
Somewhat important
Not important

92. To develop keener awareness of my environment. ① ② ③ ④
93. To succeed in business. ① ② ③ ④
94. To develop my leadership abilities. ① ② ③ ④
95. To acquire greater decision-making responsibility in my job. ① ② ③ ④
96. To understand how culture has developed. ① ② ③ ④
97. To learn more about science. ① ② ③ ④
98. To learn how people govern themselves. ① ② ③ ④
99. To become a happy person. ① ② ③ ④
100. To develop a personal philosophy related to my work. ① ② ③ ④
101. To understand how science has affected human life. ① ② ③ ④
102. To be able to write an excellent technical report. ① ② ③ ④
103. To identify an appropriate career. ① ② ③ ④
104. To improve my mathematical skills. ① ② ③ ④
105. To learn how to acquire power. ① ② ③ ④
106. To explore the world of ideas. ① ② ③ ④
107. To overcome hesitancy about expressing my views in public. ① ② ③ ④
108. To understand my own interests. ① ② ③ ④
109. To improve my self-confidence in mathematics. ① ② ③ ④
110. To enjoy music. ① ② ③ ④

111.-130.

Please respond to any goal statements provided by your college or instructor on the separate answer sheet supplied. Be sure to put the answers in the spaces for Course Goals, Items 111-130. If no items are supplied, proceed to the next section.

Expectations/Study Skills--This Course

Please respond to the following statements. Keep in mind your expectations about the particular course for which you received the survey. If you feel the item is not applicable to you in this course, then choose "Not at all like me."

Very much like me
Quite a bit like me
Somewhat like me
Not at all like me

1. When I take tests I think of the consequences of failing. ① ② ③ ④
2. I have difficulty identifying the most important points in my reading. ① ② ③ ④
3. I seldom ask my instructor to clarify concepts that I don't understand well. ① ② ③ ④
4. When I take a test I think about items on other parts of the test I can't answer. ① ② ③ ④
5. When I study new material, I often skim it to see how it is organized. ① ② ③ ④
6. When I study for exams I integrate information from different sources, such as lectures, reading, and discussions. ① ② ③ ④
7. When reading I try to relate the material to what I already know. ① ② ③ ④
8. I begin with course material but develop my own ideas about the topics. ① ② ③ ④
9. I believe I will receive an excellent grade. ① ② ③ ④
10. When I study a topic, I try to make everything fit together. ① ② ③ ④
11. I am confident that I can learn the basic concepts. ① ② ③ ④
12. I'm certain that my own ability will result in my being successful. ① ② ③ ④
13. When having difficulty recalling something, I make an effort to recall something else that might be related to it. ① ② ③ ④
14. I often find that I read assignments but don't know what they are all about. ① ② ③ ④
15. I prefer learning activities that are challenging or arouse my curiosity, even if they are difficult. ① ② ③ ④
16. It is sometimes hard for me to go on with my work if I am not encouraged. ① ② ③ ④
17. When coursework is difficult, I either give up or study only the easy parts. ① ② ③ ④
18. If I want to get a good grade, it depends on what I do. ① ② ③ ④

Types of Activities You Have Pursued in This Course

Answer the following questions indicating how often you have carried out each activity in this course. If the item is not applicable choose "Never."

Very often
Sometimes
Rarely
Never

1. I read a book related to this field that was not an assigned reading. ① ② ③ ④
2. I took detailed notes in class or on reading assignments. ① ② ③ ④
3. I enjoyed doing my coursework. ① ② ③ ④
4. I thought about applications of the material to other situations. ① ② ③ ④
5. I discussed the subject matter of this field with other students for an hour or longer. ① ② ③ ④
6. I spent a concentrated period of time—three hours or longer without interruption—studying in this field. ① ② ③ ④
7. I looked for some basic organization in course materials. ① ② ③ ④
8. I memorized facts, vocabulary, and terminology. ① ② ③ ④
9. I spent some time just browsing in the library or bookstore looking for things related to this field. ① ② ③ ④
10. I participated in a research project related to this field. ① ② ③ ④
11. I told friends about the interesting materials or ideas in the field. ① ② ③ ④
12. I underlined major points in the reading. ① ② ③ ④
13. I studied at least four hours or longer on coursework during the weekend. ① ② ③ ④
14. I tried to see how different facts and ideas fit together. ① ② ③ ④
15. I read newspaper items related to coursework. ① ② ③ ④
16. I helped another student with coursework. ① ② ③ ④
17. I recommended this field to other students. ① ② ③ ④
18. I made outlines from class notes or readings. ① ② ③ ④
19. I spent five hours or more looking up references in the library and taking notes related to coursework. ① ② ③ ④
20. I tried to relate the material to ideas and experiences of my own. ① ② ③ ④
21. I am satisfied that study in this field has helped me achieve some of my important goals. ① ② ③ ④
22. I related what I learned in this field to my other courses. ① ② ③ ④

Student Information

Please supply the information in the space provided or mark the circle corresponding to your chosen response.

1. Your student number: _____

2. Name of your college or university:

   _____

3. Your age last January 1: _____

4. Your sex:

   ① Male ② Female

5. Year you graduated from high school: _____

6. What is your expected major in college?

   _____

7. Have you formally indicated this major to the college?

   ① Yes ② No

8. How certain are you that this is the major you desire?

   ① Extremely certain
   ② Quite certain
   ③ Somewhat certain
   ④ Not at all certain

9. What is the highest college degree you plan to acquire?

   _____

10. What occupation or profession do you expect to pursue?

    _____

11. How certain are you that this is the occupation or profession you desire?

    ① Extremely certain
    ② Quite certain
    ③ Somewhat certain
    ④ Not at all certain

12. When you entered college how well prepared did you feel you were for college study?

    ① Extremely well prepared
    ② Quite prepared
    ③ Somewhat prepared
    ④ Not at all prepared

13. How many courses are you taking this term? _____ courses

14. During the academic term, how many hours per week are you employed for pay? _____ hours

15. During the academic term, on the average, how many hours do you study per week? _____ hours

16. Do you live within walking distance of the campus during academic terms?

    ① Yes ② No

17. All in all, how satisfied are you with the academic aspects of college?

    ① Very satisfied
    ② Quite satisfied
    ③ Somewhat satisfied
    ④ Not satisfied

18. All in all, how satisfied are you with the non-academic aspects of college?

    ① Very satisfied
    ② Quite satisfied
    ③ Somewhat satisfied
    ④ Not satisfied

19. How often, if ever, do you think about dropping out of college?

    ① Never have thought of it
    ② Very seldom
    ③ Occasionally
    ④ Frequently

20. Which of the following will be most influential in your choice of career? (Mark only one.)

    ① My parents value the career highly.
    ② The career will allow me leisure time.
    ③ The career pays well.
    ④ The career is challenging.
    ⑤ I am sure I can succeed in the career.

21. With regard to your major, which best indicates your situation since coming to college? (Mark only one.)

    ① I had no planned major when I entered college and still have none.
    ② I have discarded the old planned major but I have not chosen a new major yet.
    ③ I had no planned major when I entered college but I have now chosen one.
    ④ I have changed and chosen a new major.
    ⑤ I have retained the major I had at entrance.

22. With regard to your career, which best indicates your situation since coming to college? (Mark only one.)

    ① I had no planned career when I entered college and still have none.
    ② I have discarded the old planned career but I have not chosen a new career yet.
    ③ I had no planned career when I entered college but I have now chosen one.
    ④ I have changed and chosen a new career.
    ⑤ I have retained the career plans I had at entrance.

23.-31.
Please respond to any student information questions provided by your college or instructor on the separate sheet supplied. Be sure to put the answers in the spaces for Student Information, Items 23-31. If no items are supplied, proceed to the Comments section.

Comments

(Use this space to make any comments you may wish to share.)

Thank you for taking the time to complete this survey.

College Goals (Items 20-25)

Please respond to any goal statements provided by your college or instructor on this answer sheet. If you feel the item is not applicable to you, then choose "Not important." If no items are supplied, proceed to the next section.

Essential
Important
Somewhat important
Not important

20. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

21. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

22. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

23. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

24. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

25. _____
You: ① ② ③ ④
Your College Teachers: ① ② ③ ④

Course Goals (Items 111-130)

Please respond to any goal statements provided by your college or instructor on this answer sheet. If you feel the item is not applicable to you, then choose "Not important." If no items are supplied, proceed to the next section.

Essential
Important
Somewhat important
Not important

111. _____ ① ② ③ ④
112. _____ ① ② ③ ④
113. _____ ① ② ③ ④
114. _____ ① ② ③ ④
115. _____ ① ② ③ ④
116. _____ ① ② ③ ④
117. _____ ① ② ③ ④
118. _____ ① ② ③ ④
119. _____ ① ② ③ ④
120. _____ ① ② ③ ④
121. _____ ① ② ③ ④
122. _____ ① ② ③ ④
123. _____ ① ② ③ ④
124. _____ ① ② ③ ④
125. _____ ① ② ③ ④
126. _____ ① ② ③ ④
127. _____ ① ② ③ ④
128. _____ ① ② ③ ④
129. _____ ① ② ③ ④
130. _____ ① ② ③ ④

Student Information (Items 23-31)

Please respond to any student information questions provided by your college or instructor on this answer sheet. Enter your response in the space provided below or follow further instructions provided by your college or instructor. If no items are supplied, proceed to the next section.

23. _____ ① ② ③ ④ ⑤ ⑥
24. _____ ① ② ③ ④ ⑤ ⑥
25. _____ ① ② ③ ④ ⑤ ⑥
26. _____ ① ② ③ ④ ⑤ ⑥
27. _____ ① ② ③ ④ ⑤ ⑥
28. _____ ① ② ③ ④ ⑤ ⑥
29. _____ ① ② ③ ④ ⑤ ⑥
30. _____ ① ② ③ ④ ⑤ ⑥
31. _____ ① ② ③ ④ ⑤ ⑥

Student Goals Exploration

Version IR-M
(for students who have chosen a major field of study)

This questionnaire is designed to help researchers better understand the academic goals of college students. Please respond to this questionnaire within the next day or two. Read the questions and answer them fairly rapidly according to your own views. Most deal with your goals in your major field. ***There are no right or wrong answers. This is not a test and your participation is voluntary.***

Your college will provide instructions on how to return the completed survey and may supply some special items to fill blank spaces in the survey. Your student ID number may be needed to match your responses with other materials or surveys.

Examples of ways to mark circles (any of the following are acceptable):

Thank you in advance for taking the time to complete this survey.

The SGE was developed by the Research Program on Curriculum: Influences and Impacts at the National Center for Research to Improve Postsecondary Teaching and Learning, 2400 School of Education Building, University of Michigan, Ann Arbor, Michigan 48109-1259. The Center is funded by the University of Michigan and the U. S. Department of Education's Office of Educational Research and Improvement under OERI grant number G008690010.

© 1990 by the Regents of the University of Michigan for the
National Center for Research to Improve Postsecondary Teaching and Learning

Goals in Attending College

Please respond to the statements below. If you feel the item is not applicable to you, then choose "Not at all like me."

Very much like me
Quite a bit like me
Somewhat like me
Not at all like me

1. My reason for attending college is to help make the world a better place for all of us. By studying content that reflects real life situations, I can learn to adapt to a changing society and to intervene where necessary. ① ② ③ ④
2. My main purpose in college is to learn how to think effectively. I need to learn general intellectual skills, such as observing, classifying, analyzing, and synthesizing in order to gain intellectual autonomy. ① ② ③ ④
3. I believe that my instructors know the goals, objectives, course procedures, and expectations that are suitable for me. My success as a student depends on the degree to which I achieve the objectives established by my instructors. ① ② ③ ④
4. I am in college primarily to achieve my vocational goals. My education should provide me with knowledge and skills that enable me to earn a living and contribute to society. ① ② ③ ④
5. My education should involve me in a series of personally enriching experiences. I desire an education that allows me to discover myself as a unique individual and thus acquire personal freedom. ① ② ③ ④
6. In my education I want to understand the great products and discoveries of the human mind. Thus, I want to learn about the major ideas and concepts that important thinkers have illuminated, increasing both the breadth and depth of my knowledge. ① ② ③ ④
7. For me, the development of values during college is as important as learning subject knowledge. My education should help me clarify my beliefs and values and thus develop commitment and dedication to guide my life. ① ② ③ ④

Goals in Taking Courses in Your Major Field

We are interested in learning about the goals that students hope to achieve when they take courses in certain fields. Please think about courses you have taken in your major. In these courses, how important did you feel it was to make progress toward each of the goals listed below. Don't be concerned if some of the items seem not to fit your major very well. If an item does not apply in your major field, choose "Not important." Mark the circles for the proper responses.

Write the name of the major field you are keeping in mind while answering the questions below:

_____

Essential
Important
Somewhat important
Not important

1. To build a record of achievement of which I can be proud. ① ② ③ ④
2. To discover new ways of seeing and doing things. ① ② ③ ④
3. To enjoy learning for learning's sake. ① ② ③ ④
4. To weigh alternatives when making decisions. ① ② ③ ④
5. To see how different facts and ideas fit together. ① ② ③ ④
6. To improve my study skills. ① ② ③ ④
7. To learn to get along with different kinds of people. ① ② ③ ④
8. To recognize broad principles when observing specific events. ① ② ③ ④
9. To try to find the basic structure in this field of knowledge. ① ② ③ ④
10. To improve my reasoning ability--to recognize assumptions, make logical inferences, and reach correct conclusions. ① ② ③ ④
11. To understand how scholars gain new knowledge or understanding. ① ② ③ ④
12. To prepare for a life of service to others. ① ② ③ ④
13. To develop friendships and loyalties of lasting value. ① ② ③ ④
14. To become aware of different philosophies, cultures, and ways of life. ① ② ③ ④
15. To learn appropriate social skills for different situations. ① ② ③ ④
16. To develop the ability to work well with others in a group. ① ② ③ ④
17. To be able to discuss current political and social issues. ① ② ③ ④
18. To develop a broader vision of the world. ① ② ③ ④

Essential
Important
Somewhat important
Not important

19. To learn to organize my thoughts. ① ② ③ ④
20. To develop personal independence. ① ② ③ ④
21. To learn skills that enrich my daily life. ① ② ③ ④
22. To listen effectively to what others are saying. ① ② ③ ④
23. To develop the capacity to change as times change. ① ② ③ ④
24. To develop respect for and sensitivity to the views of others. ① ② ③ ④
25. To improve my writing abilities--to develop clear, correct, and effective communication. ① ② ③ ④
26. To become better informed as a citizen. ① ② ③ ④
27. To develop a philosophy of life. ① ② ③ ④
28. To understand events that people have tried to explain. ① ② ③ ④
29. To learn how things change over time. ① ② ③ ④
30. To develop the ability to see relationships, similarities, and differences among ideas. ① ② ③ ④
31. To draw my own conclusions. ① ② ③ ④
32. To appreciate individuality and independence of thought and action. ① ② ③ ④
33. To find problems and solutions in literature and film that apply to my own life. ① ② ③ ④
34. To understand how humans have learned to cope with nature. ① ② ③ ④
35. To become more broadminded. ① ② ③ ④
36. To weigh and question the opinions of experts and authorities. ① ② ③ ④
37. To understand the world around me. ① ② ③ ④
38. To be able to make ethical and moral choices. ① ② ③ ④
39. To predict specific events from broad principles. ① ② ③ ④
40 To understand the way researchers investigate questions. ① ② ③ ④
41. To increase my self-confidence or sense of self-worth. ① ② ③ ④
42. To use my imagination. ① ② ③ ④
43. To develop a capacity for self-evaluation. ① ② ③ ④
44. To help others who need my skills or services. ① ② ③ ④
45. To understand current issues in this field. ① ② ③ ④
46. To understand specific facts in this field. ① ② ③ ④

Essential
Important
Somewhat important
Not important

47. To learn things that will stimulate me to learn more on my own. ① ② ③ ④
48. To learn how to work for important causes. ① ② ③ ④
49. To make effective decisions. ① ② ③ ④
50. To be able to debate both sides of an issue effectively. ① ② ③ ④
51. To gain information that will be useful after college in my family life. ① ② ③ ④
52. To interpret evidence. ① ② ③ ④
53. To understand the complexity of the world. ① ② ③ ④
54. To achieve social status or prestige. ① ② ③ ④
55. To be able to perform credibly in my chosen occupation. ① ② ③ ④
56. To learn to accept challenges. ① ② ③ ④
57. To meet requirements necessary to enter professional or graduate school. ① ② ③ ④
58. To gain information directly useful in my current or future career. ① ② ③ ④
59. To learn to solve problems. ① ② ③ ④
60. To gain a global or international perspective. ① ② ③ ④
61. To use the skills and abilities I have more effectively. ① ② ③ ④
62. To improve my reading skills. ① ② ③ ④
63. To improve my skills in communicating by electronic means such as computers. ① ② ③ ④
64. To become a knowledgeable consumer. ① ② ③ ④
65. To develop my creative talents. ① ② ③ ④
66. To enjoy works of art. ① ② ③ ④
67. To develop closer relationships with others. ① ② ③ ④
68. To help secure world peace. ① ② ③ ④
69. To understand the causes of war and peace. ① ② ③ ④
70. To try to answer unsolved questions. ① ② ③ ④
71. To understand scientific principles and concepts. ① ② ③ ④
72. To learn how people have solved social problems. ① ② ③ ④
73. To have fun. ① ② ③ ④
74. To achieve job security. ① ② ③ ④
75. To develop leisure time interests. ① ② ③ ④
76. To help improve gender and racial equality. ① ② ③ ④

Essential
Important
Somewhat important
Not important

77. To enjoy film. ① ② ③ ④
78. To learn to interpret numerical data. ① ② ③ ④
79. To create a composition, artistic work, or invention that no one has ever created before. ① ② ③ ④
80. To contribute to the improvement of human welfare. ① ② ③ ④
81. To establish important contacts for the future. ① ② ③ ④
82. To promote international harmony. ① ② ③ ④
83. To increase my power to persuade others. ① ② ③ ④
84. To improve my speaking abilities. ① ② ③ ④
85. To learn how to use library facilities and other informational sources. ① ② ③ ④
86. To improve my ability to handle stress. ① ② ③ ④
87. To eventually become an expert in my chosen field. ① ② ③ ④
88. To investigate the unknown. ① ② ③ ④
89. To establish standards of behavior. ① ② ③ ④
90. To become aware of the consequences of new applications in science and technology. ① ② ③ ④
91. To understand my own abilities and limitations. ① ② ③ ④
92. To develop keener awareness of my environment. ① ② ③ ④
93. To succeed in business. ① ② ③ ④
94. To develop my leadership abilities. ① ② ③ ④
95. To acquire greater decision-making responsibility in my job. ① ② ③ ④
96. To understand how culture has developed. ① ② ③ ④
97. To learn more about science. ① ② ③ ④
98. To learn how people govern themselves. ① ② ③ ④
99. To become a happy person. ① ② ③ ④
100. To develop a personal philosophy related to my work. ① ② ③ ④
101. To understand how science has affected human life. ① ② ③ ④
102. To be able to write an excellent technical report. ① ② ③ ④
103. To identify an appropriate career. ① ② ③ ④
104. To improve my mathematical skills. ① ② ③ ④
105. To learn how to acquire power. ① ② ③ ④

Essential
Important
Somewhat important
Not important

106. To explore the world of ideas. ① ② ③ ④
107. To overcome hesitancy about expressing my views in public. ① ② ③ ④
108. To understand my own interests. ① ② ③ ④
109. To improve my self-confidence in mathematics. ① ② ③ ④
110. To enjoy music. ① ② ③ ④

111.-130.

Please respond to any goal statements provided by your college or instructor on the separate answer sheet supplied. Be sure to put the answers in the spaces for Goals in Your Major, Items 111-130. If no items are supplied, proceed to the next section.

Feelings About Studying in Your Major

Continue to keep in mind your major field. As you prepare to study or complete assignments in courses in this field, which statements best describe your thoughts and feelings? Mark the circles at the right to show how much each thought is like your own.

Very much like me
Quite a bit like me
Somewhat like me
Not at all like me

1. In the long run, study in this field will help me to get ahead in the world. ① ② ③ ④
2. When I complete a learning activity I usually get a sense of satisfaction. ① ② ③ ④
3. In this field, setting long-range goals is important. ① ② ③ ④
4. I complete daily learning tasks primarily because I enjoy them. ① ② ③ ④
5. I should complete what is expected of a person of my capability. ① ② ③ ④
6. I would work hard to get good grades even if I didn't like the coursework. ① ② ③ ④
7. I feel obliged to work hard only if I can see the importance of the task. ① ② ③ ④
8. I learn best when my instructor makes it clear what the goals of each assignment are. ① ② ③ ④
9. I prefer to set short-range goals so that I can get a sense of satisfaction and achievement. ① ② ③ ④
10. I believe I should set my own goals rather than accept someone else's goals for me. ① ② ③ ④
11. I would rather tackle easy problems than difficult ones. ① ② ③ ④
12. Even when study materials are dull and uninteresting, I believe I should keep working until I am finished. ① ② ③ ④
13. I learn best if I see a direct relation between my assignments and my long range goals. ① ② ③ ④
14. If I sense I can't achieve a goal, I'd rather set one that is easier to reach. ① ② ③ ④
15. I find learning in this field is very exciting and challenging. ① ② ③ ④
16. I like to plan my learning activities over a long time frame so they will fit together. ① ② ③ ④
17. I seldom need to seek advice about what my goals should be. ① ② ③ ④
18. Deciding what topics I study should be my own choice rather than my instructor's choice. ① ② ③ ④

Expectations/Study Skills in the Major

Please respond to the following statements. Keep in mind your expectations about courses you take in your major field. If you feel the item is not applicable to your major, then choose "Not at all like me."

Very much like me
Quite a bit like me
Somewhat like me
Not at all like me

1. When I take tests I think of the consequences of failing. ① ② ③ ④
2. I have difficulty identifying the most important points in my reading. ① ② ③ ④
3. I seldom ask my instructor to clarify concepts that I don't understand well. ① ② ③ ④
4. When I take a test I think about items on other parts of the test I can't answer. ① ② ③ ④
5. When I study new material, I often skim it to see how it is organized. ① ② ③ ④
6. When I study for exams I integrate information from different sources, such as lectures, reading, and discussions. ① ② ③ ④
7. When reading I try to relate the material to what I already know. ① ② ③ ④
8. I begin with course material but develop my own ideas about the topics. ① ② ③ ④
9. I believe I will receive excellent grades. ① ② ③ ④
10. When I study a topic, I try to make everything fit together. ① ② ③ ④
11. I am confident that I can learn the basic concepts. ① ② ③ ④
12. I'm certain that my own ability will result in my being successful. ① ② ③ ④
13. When having difficulty recalling something, I make an effort to recall something else that might be related to it. ① ② ③ ④
14. I often find that I read assignments but don't know what they are all about. ① ② ③ ④
15. I prefer learning activities that are challenging or arouse my curiosity, even if they are difficult. ① ② ③ ④
16. It is sometimes hard for me to go on with my work if I am not encouraged. ① ② ③ ④
17. When coursework is difficult, I either give up or study only the easy parts. ① ② ③ ④
18. If I want to get a good grade, it depends on what I do. ① ② ③ ④

Your Preferences for Ways Major Courses Could Be Organized

Which of the following subject matter organizations would you prefer in your major courses? Please respond to each statement below. If you feel an item is not applicable to your major, then choose "Not at all like my preference."

Very much like my preference
Quite a bit like my preference
Somewhat like my preference
Not at all like my preference

1. I prefer courses in which the material is organized the way relationships occur in the world. For example, I like to study patterns such as how things are related in space, time, or nature. ① ② ③ ④
2. I prefer courses in which the material is organized in ways that will help me use it in social, personal, or career settings. Thus, I like real-life problem-solving situations. ① ② ③ ④
3. I prefer courses organized around major ideas or concepts representing important relationships. For example, I like to study patterns such as the following: (1) classes and groups of objects or phenomena; (2) theories and their applications or rules and their examples; (3) relationships of simple ideas to ideas of greater complexity; or (4) relationships of logical sequence in which one idea is necessary to understand the next. ① ② ③ ④
4. I prefer courses in which the materials are organized according to my readiness to learn. For example, I should (1) first learn skills that are likely to be useful in later learning; (2) encounter familiar ideas and simple phenomena before those that are more unfamiliar and complex; or (3) understand an idea or concept before I attempt to interpret and use it. ① ② ③ ④
5. I prefer courses in which the materials are organized to help me gain knowledge and skills needed in my chosen career. Since the work tasks are clearly specified in the field I plan to enter, the needs of future employers provide important guidance. ① ② ③ ④
6. I prefer courses in which the material is organized according to how knowledge has been created. I like to study the processes of generating, discovering, or verifying knowledge. Therefore, I prefer to consider ways that scholars discover relationships. ① ② ③ ④
7. I prefer courses in which the material is organized to help me clarify and become committed to values and beliefs. I like to consider dilemmas, ethical problems, or value issues that I know are important as I try to lead a fulfilling and exemplary life. ① ② ③ ④

Types of Activities Pursued in Courses in Your Major

Answer the following questions indicating how often you have carried out each activity in courses in your major field. If the item is not applicable choose "Never."

Very often
Sometimes
Rarely
Never

1. I read a book related to this field that was not an assigned reading. ① ② ③ ④
2. I took detailed notes in class or on reading assignments. ① ② ③ ④
3. I enjoyed doing my coursework. ① ② ③ ④
4. I thought about applications of the material to other situations. ① ② ③ ④
5. I discussed the subject matter of this field with other students for an hour or longer. ① ② ③ ④
6. I spent a concentrated period of time—three hours or longer without interruption—studying in this field. ① ② ③ ④
7. I looked for some basic organization in course materials. ① ② ③ ④
8. I memorized facts, vocabulary, and terminology. ① ② ③ ④
9. I spent some time just browsing in the library or bookstore looking for things related to this field. ① ② ③ ④
10. I participated in a research project related to this field. ① ② ③ ④
11. I told friends about the interesting materials or ideas in the field. ① ② ③ ④
12. I underlined major points in the reading. ① ② ③ ④
13. I studied at least four hours or longer on coursework during the weekend. ① ② ③ ④
14. I tried to see how different facts and ideas fit together. ① ② ③ ④
15. I read newspaper items related to coursework. ① ② ③ ④
16. I helped another student with coursework. ① ② ③ ④
17. I recommended this field to other students. ① ② ③ ④
18. I made outlines from class notes or readings. ① ② ③ ④
19. I spent five hours or more looking up references in the library and taking notes related to coursework. ① ② ③ ④
20. I tried to relate the material to ideas and experiences of my own. ① ② ③ ④
21. I am satisfied that study in this field has helped me achieve some of my important goals. ① ② ③ ④
22. I related what I learned in this field to my other courses. ① ② ③ ④

Student Information

Please supply the information in the space provided or mark the circle corresponding to your chosen response.

1. Your student number: _____

2. Name of your college or university:

   _____

3. What is your major in college?

   _____

4. How certain are you that this is the major you desire?

   ① Extremely certain
   ② Quite certain
   ③ Somewhat certain
   ④ Not at all certain

5. With regard to your major, which best indicates your situation since coming to college? (Mark only one.)

   ① I had no planned major when I entered college and still have none.
   ② I have discarded the old planned major but have not chosen a new major yet.
   ③ I had no planned major when I entered college but I have now chosen one.
   ④ I have changed and chosen a new major.
   ⑤ I have retained the major I had at entrance.

6. What is the highest college degree you plan to acquire?

   _____

7. What occupation or profession do you expect to pursue?

   _____

8. How certain are you that this is the occupation or profession you desire?

   ① Extremely certain
   ② Quite certain
   ③ Somewhat certain
   ④ Not at all certain

9. With regard to your career, which best indicates your situation since coming to college? (Mark only one.)

   ① I had no planned career when I entered college and still have none.
   ② I have discarded the old planned career but have not chosen a new career yet.
   ③ I had no planned career when I entered college but I have now chosen one.
   ④ I have changed and chosen a new career.
   ⑤ I have retained the career plans I had at entrance.

10. When you entered college how well prepared did you feel you were for college study?

    ① Extremely well prepared
    ② Quite prepared
    ③ Somewhat prepared
    ④ Not at all prepared

11. How many courses are you taking this term? _____ courses

12. During the academic term, how many hours per week are you employed for pay? _____ hours

13. During the academic term, on the average, how many hours do you study per week? _____ hours

14. How many college credits have you completed in each of the following categories: (Do not include the current academic term.) (If you have not completed any college courses, please write zero where the number of credits is requested.)

    Number of Credits

    _____ 1. Communication (speech, writing)
    _____ 2. Literature
    _____ 3. Fine arts (art, dance, music, theater)
    _____ 4. Biological or physical science
    _____ 5. Mathematics, computer science, statistics, economics
    _____ 6. Social science (political science, sociology, psychology, anthropology)
    _____ 7. Religion, philosophy, values, ethics
    _____ 8. History, Western civilization, classics, world cultures
    _____ 9. Foreign language
    _____ 10. Business
    _____ 11. Vocational or trade courses (such as, radiation technology, auto repair, refrigeration, secretarial studies, etc.)
    _____ 12. Undergraduate professional courses (such as, nursing, engineering, social work, architecture, etc.)
    _____ 13. Other types of courses

15. What is your approximate overall grade point average in college thus far?

    ① D
    ② C-
    ③ C
    ④ C+ or B-
    ⑤ B
    ⑥ B+ or A-
    ⑦ A

Student Information (continued)

16. Do you live within walking distance of the campus during academic terms?

① Yes ② No

17. Did your father attend college?

① Yes ② No

18. Did your father graduate from college?

① Yes ② No

19. Did your mother attend college?

① Yes ② No

20. Did your mother graduate from college?

① Yes ② No

21. All in all, how satisfied are you with the academic aspects of college?

① Very satisfied
② Quite satisfied
③ Somewhat satisfied
④ Not satisfied

22. All in all, how satisfied are you with the non-academic aspects of college?

① Very satisfied
② Quite satisfied
③ Somewhat satisfied
④ Not satisfied

23. All in all, how satisfied are you with the progress you are making in your major?

① Very satisfied
② Quite satisfied
③ Somewhat satisfied
④ Not satisfied

24. How often, if ever, do you think about dropping out of college?

① Never have thought of it
② Very seldom
③ Occasionally
④ Frequently

25. Your age last January 1: _____

26. Your sex:

① Male ② Female

27. Your ethnic background (optional):

① White, non-Hispanic
② Black, non-Hispanic
③ Hispanic
④ Native American/Alaskan native
⑤ Asian/Pacific Islander

28. Your year in college:

① Freshman ③ Junior
② Sophomore ④ Senior

29. Year you graduated from high school: _____

30.-38.

Please respond to any student information questions provided by your college or instructor on the separate sheet supplied. Be sure to put the answers in the spaces for Student Information, Items 30-38. If no items are supplied, proceed to the Comments section.

Comments:

(Use this space to make any comments you may wish to share.)

Goals in Your Major (Items 111-130)

Please respond to any goal statements provided by your college or instructor on this answer sheet. If you feel the item is not applicable to you, then choose "Not important." If no items are supplied, proceed to the next section.

Essential
Important
Somewhat important
Not important

111. _____ ①②③④
112. _____ ①②③④
113. _____ ①②③④
114. _____ ①②③④
115. _____ ①②③④
116. _____ ①②③④
117. _____ ①②③④
118. _____ ①②③④
119. _____ ①②③④
120. _____ ①②③④
121. _____ ①②③④
122. _____ ①②③④
123. _____ ①②③④
124. _____ ①②③④
125. _____ ①②③④
126. _____ ①②③④
127. _____ ①②③④
128. _____ ①②③④
129. _____ ①②③④
130. _____ ①②③④

Student Information (Items 30-38)

Please respond to any student information questions provided by your college or instructor on this answer sheet. Enter your response in the space provided below or follow further instructions provided by your college or instructor. If no items are supplied, proceed to the next section.

30. _____ ①②③④⑤⑥
31. _____ ①②③④⑤⑥
32. _____ ①②③④⑤⑥
33. _____ ①②③④⑤⑥
34. _____ ①②③④⑤⑥
35. _____ ①②③④⑤⑥
36. _____ ①②③④⑤⑥
37. _____ ①②③④⑤⑥
38. _____ ①②③④⑤⑥

Student Goals Exploration

Faculty Perspective

Goals in Taking a College Course

The Student Goals Exploration helps college instructors better understand goals of students in their courses. This faculty survey is a companion to that instrument and helps faculty identify the goals they have for their students.

When completing this survey on student goals, focus on a particular course you teach. Fill in the information requested below to describe the course on which you are focusing.

Department: _____ Course title: _____

Desired Goals for This Course

This section of the SGE explores the goals faculty hope their students will have when taking a particular course. On the scales provided at the right indicate how important each goal should be for students in the course. As you answer these questions, please remember to keep in mind the course you specified.

Essential
Important
Somewhat important
Not important

1. To build a record of achievement of which I can be proud. ①②③④
2. To discover new ways of seeing and doing things. ①②③④
3. To enjoy learning for learning's sake. ①②③④
4. To weigh alternatives when making decisions. ①②③④
5. To see how different facts and ideas fit together. ①②③④
6. To improve my study skills. ①②③④
7. To learn to get along with different kinds of people. ①②③④
8. To recognize broad principles when observing specific events. ①②③④
9. To try to find the basic structure in this field of knowledge. ①②③④
10. To improve my reasoning ability--to recognize assumptions, make logical inferences, and reach correct conclusions. ①②③④
11. To understand how scholars gain new knowledge or understanding. ①②③④
12. To prepare for a life of service to others. ①②③④
13. To develop friendships and loyalties of lasting value. ①②③④

Essential
Important
Somewhat important
Not important

14. To become aware of different philosophies, cultures, and ways of life. ①②③④
15. To learn appropriate social skills for different situations. ①②③④
16. To develop the ability to work well with others in a group. ①②③④
17. To be able to discuss current political and social issues. ①②③④
18. To develop a broader vision of the world. ①②③④
19. To learn to organize my thoughts. ①②③④
20. To develop personal independence. ①②③④
21. To learn skills that enrich my daily life. ①②③④
22. To listen effectively to what others are saying. ①②③④
23. To develop the capacity to change as times change. ①②③④
24. To develop respect for and sensitivity to the views of others. ①②③④
25. To improve my writing abilities--to develop clear, correct, and effective communication. ①②③④
26. To become better informed as a citizen. ①②③④
27. To develop a philosophy of life. ①②③④
28. To understand events that people have tried to explain. ①②③④
29. To learn how things change over time. ①②③④
30. To develop the ability to see relationships, similarities, and differences among ideas. ①②③④
31. To draw my own conclusions. ①②③④

Essential
Important
Somewhat important
Not important

32. To appreciate individuality and independence of thought and action. ① ② ③ ④
33. To find problems and solutions in literature and film that apply to my own life. ① ② ③ ④
34. To understand how humans have learned to cope with nature. ① ② ③ ④
35. To become more broadminded. ① ② ③ ④
36. To weigh and question the opinions of experts and authorities. ① ② ③ ④
37. To understand the world around me. ① ② ③ ④
38. To be able to make ethical and moral choices. ① ② ③ ④
39. To predict specific events from broad principles. ① ② ③ ④
40. To understand the way researchers investigate questions. ① ② ③ ④
41. To increase my self-confidence or sense of self-worth. ① ② ③ ④
42. To use my imagination. ① ② ③ ④
43. To develop a capacity for self-evaluation. ① ② ③ ④
44. To help others who need my skills or services. ① ② ③ ④
45. To understand current issues in this field. ① ② ③ ④
46. To understand specific facts in this field. ① ② ③ ④
47. To learn things that will stimulate me to learn more on my own. ① ② ③ ④
48. To learn how to work for important causes. ① ② ③ ④
49. To make effective decisions. ① ② ③ ④
50. To be able to debate both sides of an issue effectively. ① ② ③ ④
51. To gain information that will be useful after college in my family life. ① ② ③ ④
52. To interpret evidence. ① ② ③ ④
53. To understand the complexity of the world. ① ② ③ ④
54. To achieve social status or prestige. ① ② ③ ④
55. To be able to perform credibly in my chosen occupation. ① ② ③ ④
56. To learn to accept challenges. ① ② ③ ④
57. To meet requirements necessary to enter professional or graduate school. ① ② ③ ④

Essential
Important
Somewhat important
Not important

58. To gain information directly useful in my current or future career. ① ② ③ ④
59. To learn to solve problems. ① ② ③ ④
60. To gain a global or international perspective. ① ② ③ ④
61. To use the skills and abilities I have more effectively. ① ② ③ ④
62. To improve my reading skills. ① ② ③ ④
63. To improve my skills in communicating by electronic means such as computers. ① ② ③ ④
64. To become a knowledgeable consumer. ① ② ③ ④
65. To develop my creative talents. ① ② ③ ④
66. To enjoy works of art. ① ② ③ ④
67. To develop closer relationships with others. ① ② ③ ④
68. To help secure world peace. ① ② ③ ④
69. To understand the causes of war and peace. ① ② ③ ④
70. To try to answer unsolved questions. ① ② ③ ④
71. To understand scientific principles and concepts. ① ② ③ ④
72. To learn how people have solved social problems. ① ② ③ ④
73. To have fun. ① ② ③ ④
74. To achieve job security. ① ② ③ ④
75. To develop leisure time interests. ① ② ③ ④
76. To help improve gender and racial equality. ① ② ③ ④
77. To enjoy film. ① ② ③ ④
78. To learn to interpret numerical data. ① ② ③ ④
79. To create a composition, artistic work, or invention that no one has ever created before. ① ② ③ ④
80. To contribute to the improvement of human welfare. ① ② ③ ④
81. To establish important contacts for the future. ① ② ③ ④
82. To promote international harmony. ① ② ③ ④
83. To increase my power to persuade others. ① ② ③ ④
84. To improve my speaking abilities. ① ② ③ ④
85. To learn how to use library facilities and other informational sources. ① ② ③ ④
86. To improve my ability to handle stress. ① ② ③ ④
87. To eventually become an expert in my chosen field. ① ② ③ ④

Essential
Important
Somewhat important
Not important

88. To investigate the unknown. ① ② ③ ④
89. To establish standards of behavior. ① ② ③ ④
90. To become aware of the consequences of new applications in science and technology. ① ② ③ ④
91. To understand my own abilities and limitations. ① ② ③ ④
92. To develop keener awareness of my environment. ① ② ③ ④
93. To succeed in business. ① ② ③ ④
94. To develop my leadership abilities. ① ② ③ ④
95. To acquire greater decision-making responsibility in my job. ① ② ③ ④
96. To understand how culture has developed. ① ② ③ ④
97. To learn more about science. ① ② ③ ④
98. To learn how people govern themselves. ① ② ③ ④
99. To become a happy person. ① ② ③ ④
100. To develop a personal philosophy related to my work. ① ② ③ ④
101. To understand how science has affected human life. ① ② ③ ④
102. To be able to write an excellent technical report. ① ② ③ ④
103. To identify an appropriate career. ① ② ③ ④
104. To improve my mathematical skills. ① ② ③ ④
105. To learn how to acquire power. ① ② ③ ④
106. To explore the world of ideas. ① ② ③ ④
107. To overcome hesitancy about expressing my views in public. ① ② ③ ④
108. To understand my own interests. ① ② ③ ④
109. To improve my self-confidence in mathematics. ① ② ③ ④
110. To enjoy music. ① ② ③ ④

(You may add other important goal statements in the spaces provided on page 4 of this survey.)

Notes/Comments:

(If you have notes or comments, please use the space below. Then proceed to the final page of this survey.)

111.-130.

Please add other important goal statements for your course here.

	Essential	Important	Somewhat important	Not important
111. _____	①	②	③	④
112. _____	①	②	③	④
113. _____	①	②	③	④
114. _____	①	②	③	④
115. _____	①	②	③	④
116. _____	①	②	③	④
117. _____	①	②	③	④
118. _____	①	②	③	④
119. _____	①	②	③	④
120. _____	①	②	③	④
121. _____	①	②	③	④
122. _____	①	②	③	④
123. _____	①	②	③	④
124. _____	①	②	③	④
125. _____	①	②	③	④
126. _____	①	②	③	④
127. _____	①	②	③	④
128. _____	①	②	③	④
129. _____	①	②	③	④
130. _____	①	②	③	④

Course Information

The following information may be useful if your college or university is conducting any studies of student goals broader than a single course. Complete any parts of the course description below that are appropriate for use on your campus.

1. Level of course?
   - ① Introductory
   - ② Intermediate
   - ③ Advanced
   - ④ Senior seminar or capstone

2. Type of course?
   - ① Lecture
   - ② Seminar
   - ③ Combination

3. Approximate number of students in course: _____

4. Approximate number of students in the section you teach: _____

	Most common	Common	Least common
5. Reasons students take this course:			
a. Required for major	①	②	③
b. Required for general education or core	①	②	③
c. Elective	①	②	③

The SGE was developed by the Research Program on Curriculum: Influences and Impacts at the National Center for Research to Improve Postsecondary Teaching and Learning, 2400 School of Education Building, University of Michigan, Ann Arbor, Michigan 48109-1259. The Center is funded by the University of Michigan and the U. S. Department of Education's Office of Educational Research and Improvement under OERI grant number G008690010.

© 1990 by the Regents of the University of Michigan for the National Center for Research to Improve Postsecondary Teaching and Learning

APPENDIXES

Appendix 1. Computer Coding and Data Processing Instructions - Institutional Research Versions

APPENDIX 1

Computer Coding and Data Processing Instructions

Institutional Research Guide
Preliminary Edition

STUDENT GOALS EXPLORATION USER'S MANUAL

National Center for Research to Improve
Postsecondary Teaching and Learning
(NCRIPTAL)

2400 School of Education Building
University of Michigan
Ann Arbor, Michigan 48109-1259
(313) 936-2741

Copyright © 1991 by the Regents of The University of Michigan
for the National Center for Research to Improve Postsecondary
Teaching and Learning. All rights reserved.

The project presented, or reported herein, was performed pursuant to a grant from the Office of Research of the Office of Educational Research and Improvement/Department of Education (OERI/ED). However, the opinions expressed herein do not necessarily reflect the position or policy of the OERI/ED or the Regents of the University of Michigan should be inferred.

Computer Coding and Data Processing Instructions
for the
Institutional Research Guide

Student Goals Exploration User's Manual
Preliminary Version

Table of Contents

APPENDIX 1:

A SGE Version IR Codebooks 1
1. SGE Version IR-1 Codebook 3
2. SGE Version IR-2 Codebook 19
3. SGE Version IR-M Codebook 33

B. Coding Schemes 47
1. Course and Major Codes - Brief Version (Adapted From HEGIS Categories) 49
2. Department Codes (Adapted From HEGIS Categories) 53
3. Codes for Expected Occupation 55
4. HEGIS Classification 57

A. SGE VERSION IR CODEBOOKS

1. SGE VERSION IR-1 CODEBOOK

Student Goals Exploration	Version IR-1	CODEBOOK	10/2/90

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
GOALS IN ATTENDING COLLEGE						
v1	1	r1.ac1s	better job-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.1	F1.0
v2		r1.ac1t	better job-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.2	F1.0
v3	2	r1.ac2s	general educ-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.3	F1.0
v4		r1.ac2t	general educ-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.4	F1.0
v5	3	r1.ac3s	expert-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.5	F1.0
v6		r1.ac3t	expert-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.6	F1.0
v7	4	r1.ac4s	study skills-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.7	F1.0
v8		r1.ac4t	study skills-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.8	F1.0
v9	5	r1.ac5s	prep life-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.9	F1.0
v10		r1.ac5t	prep life-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.10	F1.0
v11	6	r1.ac6s	away-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.11	F1.0
v12		r1.ac6t	away-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.12	F1.0
v13	7	r1.ac7s	cultured-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.13	F1.0
v14		r1.ac7t	cultured-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.14	F1.0
v15	8	r1.ac8s	some to do-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.15	F1.0
v16		r1.ac8t	some to do-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.16	F1.0
v17	9	r1.ac9s	money-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.17	F1.0
v18		r1.ac9t	money-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.18	F1.0
v19	10	r1.ac10s	success career-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.19	F1.0
v20		r1.ac10t	success career-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.20	F1.0
v21	11	r1.ac11s	knowledge-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.21	F1.0

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v22		r1.ac11t	knowledge-teach	1-4	L1.22	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v23	12	r1.ac12s	interesting-me	1-4	L1.23	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v24		r1.ac12t	interesting-teach	1-4	L1.24	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v25	13	r1.ac13s	grad/prof sch-me	1-4	L1.25	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v26		r1.ac13t	grad/prof sch-teach	1-4	L1.26	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v27	14	r1.ac14s	family expects-me	1-4	L1.27	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v28		r1.ac14t	family expects-teach	1-4	L1.28	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v29	15	r1.ac15s	friends-me	1-4	L1.29	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v30		r1.ac15t	friends-teach	1-4	L1.30	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v31	16	r1.ac16s	citizen-me	1-4	L1.31	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v32		r1.ac16t	citizen-teach	1-4	L1.32	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v33	17	r1.ac17s	creative-me	1-4	L1.33	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v34		r1.ac17t	creative-teach	1-4	L1.34	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v35	18	r1.ac18s	serve society-me	1-4	L1.35	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v36		r1.ac18t	serve society-teach	1-4	L1.36	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v37	19	r1.ac19s	social position-me	1-4	L1.37	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v38		r1.ac19t	social position-teach	1-4	L1.38	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v39	20	r1.ac20s	_____-me	1-4	L1.39	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v40		r1.ac20t	_____-teach	1-4	L1.40	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v41	21	r1.ac21s	_____-me	1-4	L1.41	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v42		r1.ac21t	_____-teach	1-4	L1.42	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v43	22	r1.ac22s	_____-me	1-4	L1.43	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v44		r1.ac22t	_____-teach	1-4	L1.44	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v45	23	r1.ac23s	_____-me	1-4	L1.45	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v46		r1.ac23t	_____-teach	1-4	L1.46	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v47	24	r1.ac24s	_____-me	1-4	L1.47	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v48		r1.ac24t	_____-teach	1-4	L1.48	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v49	25	r1.ac25s	_____-me	1-4	L1.49	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v50		r1.ac25t	_____-teach	1-4	L1.50	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		

GOALS IN ATTENDING COLLEGE (continued)

v51	1	r1.co1	world better	1-4	L1.51	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v52	2	r1.co2	think effectively	1-4	L1.52	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v53	3	r1.co3	achieve objectives	1-4	L1.53	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v54	4	r1.co4	vocational goals	1-4	L1.54	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v55	5	r1.co5	personally enrich	1-4	L1.55	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v56	6	r1.co6	great ideas	1-4	L1.56	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v57	7	r1.co7	clarify values	1-4	L1.57	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		

GOALS IN TAKING THIS COURSE

v58		r1.field	course considered	0001-9999	L1.58-61	F4.0
				use HEGIS codes or atteched list		
v59		r1.numb	course number	001-998	L1.62-64	F3.0
				999=miss		
v60		r1.dept	dept offering course	0001-9998	L65-68	F4.0
				use HEGIS codes or attached list	9999=miss	
v61		r1.reas1	required	0-1	L1.69	F1.0
				0=no check 1=check		
v62		r1.reas2	fit	0-1	L1.70	F1.0
				0=no check 1=check		
v63		r1.reas3	best	0-1	L1.71	F1.0
				0=no check 1=check		

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v64	1	r1.gc1	record of achieve	1-4	L1.72	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v65	2	r1.gc2	new ways of seeing	1-4	L1.73	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v66	3	r1.gc3	learnings sake	1-4	L1.74	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v67	4	r1.gc4	weigh alternatives	1-4	L1.75	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v68	5	r1.gc5	ideas fit together	1-4	L1.76	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v69	6	r1.gc6	imp study skills	1-4	L1.77	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v70	7	r1.gc7	diff kinds people	1-4	L1.78	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v71	8	r1.gc8	broad principles	1-4	L1.79	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v72	9	r1.gc9	structure knowledge	1-4	L1.80	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v73	10	r1.gc10	reasoning ability	1-4	L2.1	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v74	11	r1.gc11	scholar gain knowl	1-4	L2.2	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v75	12	r1.gc12	life of service	1-4	L2.3	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v76	13	r1.gc13	friendships	1-4	L2.4	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v77	14	r1.gc14	philosophies/cultures	1-4	L2.5	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v78	15	r1.gc15	social skills	1-4	L2.6	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v79	16	r1.gc16	work in group	1-4	L2.7	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v80	17	r1.gc17	discuss issues	1-4	L2.8	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v81	18	r1.gc18	broader vision	1-4	L2.9	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v82	19	r1.gc19	organize thoughts	1-4	L2.10	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v83	20	r1.gc20	personal independ	1-4	L2.11	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v84	21	r1.gc21	learn daily skills	1-4	L2.12	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v85	22	r1.gc22	listen effectively	1-4	L2.13	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v86	23	r1.gc23	adapt with changes	1-4	L2.14	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v87	24	r1.gc24	respect sensitivity	1-4	L2.15	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v88	25	r1.gc25	improve writing	1-4	L2.16	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v89	26	r1.gc26	informed citizen	1-4	L2.17	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v90	27	r1.gc27	philosophy of life	1-4	L2.18	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v91	28	r1.gc28	understand events	1-4	L2.19	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v92	29	r1.gc29	how things change	1-4	L2.20	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v93	30	r1.gc30	see relationships	1-4	L2.21	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v94	31	r1.gc31	draw conclusions	1-4	L2.22	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v95	32	r1.gc32	apprec indiv action	1-4	L2.23	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v96	33	r1.gc33	apply FNA to life	1-4	L2.24	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v97	34	r1.gc34	human cope w/nature	1-4	L2.25	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v98	35	r1.gc35	become broadminded	1-4	L2.26	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v99	36	r1.gc36	question experts	1-4	L2.27	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v100	37	r1.gc37	understand world	1-4	L2.28	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v101	38	r1.gc38	ethical and moral	1-4	L2.29	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v102	39	r1.gc39	predict events	1-4	L2.30	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v103	40	r1.gc40	research investigate	1-4	L2.31	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v104	41	r1.gc41	self confidence	1-4	L2.32	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v105	42	r1.gc42	imagination	1-4	L2.33	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v106	43	r1.gc43	self evaluation	1-4	L2.34	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v107	44	r1.gc44	help others	1-4	L2.35	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v108	45	r1.gc45	current issues	1-4	L2.36	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v109	46	r1.gc46	specific facts	1-4	L2.37	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v110	47	r1.gc47	stimulate learning	1-4	L2.38	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v111	48	r1.gc48	work for causes	1-4	L2.39	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v112	49	r1.gc49	effective decisions	1-4	L2.40	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v113	50	r1.gc50	debate issues	1-4	L2.41	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v114	51	r1.gc51	gain information	1-4	L2.42	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v115	52	r1.gc52	interpret evidence	1-4	L2.43	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v116	53	r1.gc53	complexity of world	1-4	L2.44	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v117	54	r1.gc54	social status	1-4	L2.45	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v118	55	r1.gc55	perform credibly	1-4	L2.46	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v119	56	r1.gc56	accept challenges	1-4	L2.47	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v120	57	r1.gc57	prof or grad school	1-4	L2.48	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v121	58	r1.gc58	gain career info	1-4	L2.49	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v122	59	r1.gc59	solve problems	1-4	L2.50	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v123	60	r1.gc60	global perspective	1-4	L2.51	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v124	61	r1.gc61	skills/abilities	1-4	L2.52	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v125	62	r1.gc62	reading skills	1-4	L2.53	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v126	63	r1.gc63	electronic skills	1-4	L2.54	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v127	64	r1.gc64	consumer	1-4	L2.55	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v128	65	r1.gc65	creative talents	1-4	L2.56	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v129	66	r1.gc66	works of art	1-4	L2.57	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v130	67	r1.gc67	closer relationships	1-4	L2.58	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v131	68	r1.gc68	secure world peace	1-4	L2.59	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v132	69	r1.gc69	causes of war/peace	1-4	L2.60	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v133	70	r1.gc70	unsolved questions	1-4	L2.61	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v134	71	r1.gc71	scientific principles	1-4	L2.62	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v135	72	r1.gc72	social problems	1-4	L2.63	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v136	73	r1.gc73	have fun	1-4	L2.64	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v137	74	r1.gc74	job security	1-4	L2.65	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v138	75	r1.gc75	leisure interests	1-4	L2.66	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v139	76	r1.gc76	gender/race equity	1-4	L2.67	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v140	77	r1.gc77	enjoy film	1-4	L2.68	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v141	78	r1.gc78	numerical data	1-4	L2.69	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v142	79	r1.gc79	artistic work	1-4	L2.70	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v143	80	r1.gc80	human welfare	1-4	L2.71	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v144	81	r1.gc81	contacts for future	1-4	L2.72	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v145	82	r1.gc82	internatl harmony	1-4	L2.73	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v146	83	r1.gc83	persuade others	1-4	L2.74	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v147	84	r1.gc84	speaking abilities	1-4	L2.75	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v148	85	r1.gc85	library facilities	1-4	L2.76	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v149	86	r1.gc86	handle stress	1-4	L2.77	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v150	87	r1.gc87	expert in field	1-4	L2.78	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v151	88	r1.gc88	investigate unknown	1-4	L2.79	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v152	89	r1.gc89	standards behavior	1-4	L2.80	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v153	90	r1.gc90	conseq technology	1-4	L3.1	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v154	91	r1.gc91	ability limitations	1-4	L3.2	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v155	92	r1.gc92	aware environment	1-4	L3.3	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v156	93	r1.gc93	succeed in business	1-4	L3.4	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v157	94	r1.gc94	leadership ability	1-4	L3.5	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v158	95	r1.gc95	decision respons.	1-4	L3.6	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v159	96	r1.gc96	culture developed	1-4	L3.7	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v160	97	r1.gc97	learn about science	1-4	L3.8	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v161	98	r1.gc98	people govern	1-4	L3.9	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v162	99	r1.gc99	happy person	1-4	L3.10	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v163	100	r1.gc100	work philosophy	1-4	L3.11	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v164	101	r1.gc101	science affects life	1-4	L3.12	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v165	102	r1.gc102	technical report	1-4	L3.13	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v166	103	r1.gc103	approp career	1-4	L3.14	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v167	104	r1.gc104	math skills	1-4	L3.15	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v168	105	r1.gc105	acquire power	1-4	L3.16	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v169	106	r1.gc106	explore ideas	1-4	L3.17	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v170	107	r1.gc107	overcome hesitancy	1-4	L3.18	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v171	108	r1.gc108	understand interests	1-4	L3.19	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v172	109	r1.gc109	improve conf in math	1-4	L3.20	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v173	110	r1.gc110	enjoy music	1-4	L3.21	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v174	111	r1.gc111	_____	1-4	L3.22	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v175	112	r1.gc112	_____	1-4	L3.23	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v176	113	r1.gc113	_____	1-4	L3.24	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v177	114	r1.gc114	_____	1-4	L3.25	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v178	115	r1.gc115	_____	1-4	L3.26	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v179	116	r1.gc116	_ _ _ _ _ _ _ _ _	1-4	L3.27	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v180	117	r1.gc117	_ _ _ _ _ _ _ _ _	1-4	L3.28	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v181	118	r1.gc118	_ _ _ _ _ _ _ _ _	1-4	L3.29	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v182	119	r1.gc119	_ _ _ _ _ _ _ _ _	1-4	L3.30	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v183	120	r1.gc120	_ _ _ _ _ _ _ _ _	1-4	L3.31	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v184	121	r1.gc121	_ _ _ _ _ _ _ _ _	1-4	L3.32	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v185	122	r1.gc122	_ _ _ _ _ _ _ _ _	1-4	L3.33	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v186	123	r1.gc123	_ _ _ _ _ _ _ _ _	1-4	L3.34	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v187	124	r1.gc124	_ _ _ _ _ _ _ _ _	1-4	L3.35	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v188	125	r1.gc125	_ _ _ _ _ _ _ _ _	1-4	L3.36	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v189	126	r1.gc126	_ _ _ _ _ _ _ _ _	1-4	L3.37	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v190	127	r1.gc127	_ _ _ _ _ _ _ _ _	1-4	L3.38	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v191	128	r1.gc128	_ _ _ _ _ _ _ _ _	1-4	L3.39	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v192	129	r1.gc129	_ _ _ _ _ _ _ _ _	1-4	L3.40	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v193	130	r1.gc130	_ _ _ _ _ _ _ _ _	1-4	L3.41	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

FEELINGS ABOUT STUDYING IN THIS COURSE

v194	1	r1.fas1	study to get ahead	1-4	L3.42	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v195	2	r1.fas2	sense satisfaction	1-4	L3.43	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v196	3	r1.fas3	long range goals	1-4	L3.44	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v197	4	r1.fas4	daily learning tasks	1-4	L3.45	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v198	5	r1.fas5	complete expected	1-4	L3.46	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v199	6	r1.fas6	work to get grades	1-4	L3.47	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v200	7	r1.fas7	work if import.	1-4	L3.48	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v201	8	r1.fas8	clear assign.	1-4	L3.49	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v202	9	r1.fas9	short range goals	1-4	L3.50	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v203	10	r1.fas10	set own goals	1-4	L3.51	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v204	11	r1.fas11	prefer easy problems	1-4	L3.52	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v205	12	r1.fas12	work even if dull	1-4	L3.53	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v206	13	r1.fas13	relate assgn goal	1-4	L3.54	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v207	14	r1.fas14	set easier goals	1-4	L3.55	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v208	15	r1.fas15	learn is exciting	1-4	L3.56	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v209	16	r1.fas16	plan activities	1-4	L3.57	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v210	17	r1.fas17	seldom seek advice	1-4	L3.58	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v211	18	r1.fas18	topics own choice	1-4	L3.59	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		

EXPECTATIONS/STUDY SKILLS IN THIS COURSE

v212	1	r1.ess1	consequences fail	1-4	L3.60	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v213	2	r1.ess2	important points	1-4	L3.61	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v214	3	r1.ess3	clarify concepts	1-4	L3.62	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v215	4	r1.ess4	items can't answer	1-4	L3.63	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v216	5	r1.ess5	skim material	1-4	L3.64	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v217	6	r1.ess6	study/integ exams	1-4	L3.65	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v218	7	r1.ess7	relate readings	1-4	L3.66	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v219	8	r1.ess8	course material	1-4	L3.67	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v220	9	r1.ess9	expect good grades	1-4	L3.68	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v221	10	r1.ess10	fit together	1-4	L3.69	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v222	11	r1.ess11	basic concepts	1-4	L3.70	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v223	12	r1.ess12	expect success	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.71	F1.0
v224	13	r1.ess13	recall and relate	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.72	F1.0
v225	14	r1.ess14	dont get readings	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.73	F1.0
v226	15	r1.ess15	prefer challenge	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.74	F1.0
v227	16	r1.ess16	need encouragement	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.75	F1.0
v228	17	r1.ess17	give up easily	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.76	F1.0
v229	18	r1.ess18	good grade I do	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.77	F1.0
INSERT 3 BLANK SPACES HERE					L3.78-80	F3.0

STUDENT INFORMATION

v230	1	r1.num	student number	1-99999	L4.1-5	F5.0
v231	2	r1.coll	college *use FICE codes or local codes* *99999=miss*	00001-99998	L4.6-10	F5.0
v232	3	r1.age	age last January	17-98 99=miss	L4.11-12	F2.0
v233	4	r1.sex	gender	1-2 1=Male 2=Female 9=miss	L4.13	F1.0
v234	5	r1.ethn	ethnic background	1-5 1=White 2=Black 3=Hispan 4=NatAm 5=Asian 9=miss	L4.14	F1.0
v235	6	r1.year	year in coll	1-4 1=fresh 2=soph 3=jr 4=sr 9=miss	L4.15	F1.0
v236	7	r1.grad	HS grad year	10-98 99=miss	L4.16-17	F2.0
v237	8	r1.first	first college	1-2 1=Yes 2=No 9=miss	L4.18	F1.0
v238	9	r1.major	major	0001-9999	L4.19-22	F4.0

useHEGIS or IPEDS major codes or refer to attached list

v239	10	r1.decl	is major declared	1-2 1=Yes 2=No 9=miss	L4.23	F1.0
v240	11	r1.cert	certain of major	1-4 1=extrem 2=quite 3=smwhat 4=not 9=miss	L4.24	F1.0

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v241	12	r1.high	highest degree	00-98 01=voc. ct. 02=AA 03=BA/BS 04=MA/MS 05= JD/LLB 06=MD/DDS 07=PhD etc 98=dknow 99=miss	L4.25-26	F2.0
v242	13	r1.occ	expected occupation *see attached list of occupations*	00-98 99=miss	L4.27-28	F2.0
v243	14	r1.occt	certain of occuptn	1-4 1=extrem 2=quite 3=smwhat 4=not 9=miss	L4.29	F1.0
v244	15	r1.prep	prep for college	1-4 1=extrem 2=quite 3=smwhat 4=not 9=miss	L4.30	F1.0
v245	16	r1.crse	courses this term	1-8 9=miss	L4.31	F1.0
v246	17	r1.empl	hours employed	00-98 99=miss	L4.32-33	F2.0
v247	18	r1.study	hours studying	00-98 99=miss	L4.34-35	F2.0
v248	19	r1.HSgpa	high school gpa	1-7 1=D 2=C- 3=C 4=C+/B- 5=B 6=B+/A- 7=A 9=miss	L4.36	F1.0
v249	20	r1.live	walking distance	1-2 1=yes 2=no 9=miss	L4.37	F1.0
v250	21	r1.facol	father attend coll	1-2 1=yes 2=no 9=miss	L4.38	F1.0
v251	22	r1.fgrad	father grad coll	1-2 1=yes 2=no 9=miss	L4.39	F1.0
v252	23	r1.mocol	mother attend coll	1-2 1=yes 2=no 9=miss	L4.40	F1.0
v253	24	r1.mgrad	mother grad coll	1-2 1=yes 2=no 9=miss	L4.41	F1.0
v255	25	r1.focc	fathers occupation	01-11	L4.42-43	F2.0

1=clerical/sales
2=crafts/technical
3=farmer/farm manager
4=homemaker
5=laborer
6=manager/administrator
7=service worker
8=professional
9=proprietor or owner
10=operative
11=military
99=miss

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v256	26	r1.mocc	mothers occupation 1=clerical/sales 2=crafts/technical 3=farmer/farm manager 4=homemaker 5=laborer 6=manager/administrator 7=service worker 8=professional 9=proprietor or owner 10=operative 11=military 99=miss	01-11	L4.44-45	F2.0
v257	27	r1.sacad	satisfied academic 1=very 2=quite 3=smwht 4=not 9=miss	1-4	L4.46	F1.0
v258	28	r1.sanon	satisfied nonacad 1=very 2=quite 3=smwht 4=not 9=miss	1-4	L4.47	F1.0
v259	29	r1.drop	think of drop out 1=never 2=seldom 3=occass 4=freq 9=miss	1-4	L4.48	F1.0
v260	30	r1.infcrs	influence avoid course 1=nouse 2=work 3=poort 4=easy 5=fail 9=miss	1-5	L4.49	F1.0
v261	31	r1.infcar	influence career 1=parent 2=leisur 3=pay 4=challg 5=succd 9=miss	1-5	L4.50	F1.0
v262	32	r1.stu1	_____	1-6	L4.51	F1.0
v263	33	r1.stu2	_____	1-6	L4.52	F1.0
v264	34	r1.stu3	_____	1-6	L4.53	F1.0
v265	35	r1.stu4	_____	1-6	L4.54	F1.0
v266	36	r1.stu5	_____	1-6	L4.55	F1.0
v267	37	r1.stu6	_____	1-6	L4.56	F1.0
v268	38	r1.stu7	_____	1-6	L4.57	F1.0
v269	39	r1.stu8	_____	1-6	L4.58	F1.0
v270	40	r1.stu9	_____	1-6	L4.59	F1.0

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form

2. SGE VERSION IR-2 CODEBOOK

Student Goals Exploration	Version IR-2	CODEBOOK	10/2/90

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
GOALS IN ATTENDING COLLEGE						
v1	1	r2.ac1s	better job-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.1	F1.0
v2		r2.ac1t	better job-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.2	F1.0
v3	2	r2.ac2s	general educ-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.3	F1.0
v4		r2.ac2t	general educ-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.4	F1.0
v5	3	r2.ac3s	expert-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.5	F1.0
v6		r2.ac3t	expert-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.6	F1.0
v7	4	r2.ac4s	study skills-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.7	F1.0
v8		r2.ac4t	study skills-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.8	F1.0
v9	5	r2.ac5s	prep life-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.9	F1.0
v10		r2.ac5t	prep life-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.10	F1.0
v11	6	r2.ac6s	away-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.11	F1.0
v12		r2.ac6t	away-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.12	F1.0
v13	7	r2.ac7s	cultured-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.13	F1.0
v14		r2.ac7t	cultured-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.14	F1.0
v15	8	r2.ac8s	some to do-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.15	F1.0
v16		r2.ac8t	some to do-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.16	F1.0
v17	9	r2.ac9s	money-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.17	F1.0
v18		r2.ac9t	money-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.18	F1.0
v19	10	r2.ac10s	success career-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.19	F1.0
v20		r2.ac10t	success career-teach	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.20	F1.0
v21	11	r2.ac11s	knowledge-me	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.21	F1.0

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v22		r2.ac11t	knowledge-teach	1-4	L1.22	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v23	12	r2.ac12s	interesting-me	1-4	L1.23	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v24		r2.ac12t	interesting-teach	1-4	L1.24	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v25	13	r2.ac13s	grad/prof sch-me	1-4	L1.25	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v26		r2.ac13t	grad/prof sch-teach	1-4	L1.26	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v27	14	r2.ac14s	family expects-me	1-4	L1.27	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v28		r2.ac14t	family expects-teach	1-4	L1.28	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v29	15	r2.ac15s	friends-me	1-4	L1.29	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v30		r2.ac15t	friends-teach	1-4	L1.30	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v31	16	r2.ac16s	citizen-me	1-4	L1.31	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v32		r2.ac16t	citizen-teach	1-4	L1.32	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v33	17	r2.ac17s	creative-me	1-4	L1.33	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v34		r2.ac17t	creative-teach	1-4	L1.34	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v35	18	r2.ac18s	serve society-me	1-4	L1.35	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v36		r2.ac18t	serve society-teach	1-4	L1.36	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v37	19	r2.ac19s	social position-me	1-4	L1.37	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v38		r2.ac19t	social position-teach	1-4	L1.38	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v39	20	r2.ac20s	_____-me	1-4	L1.39	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v40		r2.ac20t	_____-teach	1-4	L1.40	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v41	21	r2.ac21s	_____-me	1-4	L1.41	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v42		r2.ac21t	_____-teach	1-4	L1.42	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		
v43	22	r2.ac22s	_____-me	1-4	L1.43	F1.0
				1=notimp 2=somimp 3=imp 4=essntl 9=miss		

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v44		r2.ac22t	_____-teach	1-4	L1.44	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v45	23	r2.ac23s	_____-me	1-4	L1.45	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v46		r2.ac23t	_____-teach	1-4	L1.46	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v47	24	r2.ac24s	_____-me	1-4	L1.47	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v48		r2.ac24t	_____-teach	1-4	L1.48	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v49	25	r2.ac25s	_____-me	1-4	L1.49	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v50		r2.ac25t	_____-teach	1-4	L1.50	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
GOALS IN ATTENDING COLLEGE (continued)						
v51	1	r2.co1	world better	1-4	L1.51	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v52	2	r2.co2	think effectively	1-4	L1.52	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v53	3	r2.co3	achieve objectives	1-4	L1.53	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v54	4	r2.co4	vocational goals	1-4	L1.54	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v55	5	r2.co5	personally enrich	1-4	L1.55	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v56	6	r2.co6	great ideas	1-4	L1.56	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v57	7	r2.co7	clarify values	1-4	L1.57	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
GOALS IN TAKING THIS COURSE						
v58		r2.field	course considered	0001-9999	L1.58-61	F4.0
			use HEGIS codes or attached list			
v59		r2.numb	course number	001-998	L1.62-64	F3.0
				999=miss		
v60		r2.dept	dept offering course	0001-9998	L65-68	F4.0
			use HEGIS codes or attached list			
				9999=miss		
v61		r2.reas1	required	0-1	L1.69	F1.0
				0=no check 1=check		
v62		r2.reas2	fit	0-1	L1.70	F1.0
				0=no check 1=check		
v63		r2.reas3	best	0-1	L1.71	F1.0
				0=no check 1=check		

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v64	1	r2.gc1	record of achieve	1-4	L1.72	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v65	2	r2.gc2	new ways of seeing	1-4	L1.73	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v66	3	r2.gc3	learnings sake	1-4	L1.74	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v67	4	r2.gc4	weigh alternatives	1-4	L1.75	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v68	5	r2.gc5	ideas fit together	1-4	L1.76	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v69	6	r2.gc6	imp study skills	1-4	L1.77	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v70	7	r2.gc7	diff kinds people	1-4	L1.78	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v71	8	r2.gc8	broad principles	1-4	L1.79	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v72	9	r2.gc9	structure knowledge	1-4	L1.80	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v73	10	r2.gc10	reasoning ability	1-4	L2.1	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v74	11	r2.gc11	scholar gain knowl	1-4	L2.2	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v75	12	r2.gc12	life of service	1-4	L2.3	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v76	13	r2.gc13	friendships	1-4	L2.4	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v77	14	r2.gc14	philosophies/cultures	1-4	L2.5	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v78	15	r2.gc15	social skills	1-4	L2.6	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v79	16	r2.gc16	work in group	1-4	L2.7	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v80	17	r2.gc17	discuss issues	1-4	L2.8	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v81	18	r2.gc18	broader vision	1-4	L2.9	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v82	19	r2.gc19	organize thoughts	1-4	L2.10	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v83	20	r2.gc20	personal independ	1-4	L2.11	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v84	21	r2.gc21	learn daily skills	1-4	L2.12	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v85	22	r2.gc22	listen effectively	1-4	L2.13	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v86	23	r2.gc23	adapt with changes	1-4	L2.14	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v87	24	r2.gc24	respect sensitivity	1-4	L2.15	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v88	25	r2.gc25	improve writing	1-4	L2.16	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v89	26	r2.gc26	informed citizen	1-4	L2.17	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v90	27	r2.gc27	philosophy of life	1-4	L2.18	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v91	28	r2.gc28	understand events	1-4	L2.19	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v92	29	r2.gc29	how things change	1-4	L2.20	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v93	30	r2.gc30	see relationships	1-4	L2.21	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v94	31	r2.gc31	draw conclusions	1-4	L2.22	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v95	32	r2.gc32	apprec indiv action	1-4	L2.23	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v96	33	r2.gc33	apply FNA to life	1-4	L2.24	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v97	34	r2.gc34	human cope w/nature	1-4	L2.25	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v98	35	r2.gc35	become broadminded	1-4	L2.26	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v99	36	r2.gc36	question experts	1-4	L2.27	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v100	37	r2.gc37	understand world	1-4	L2.28	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v101	38	r2.gc38	ethical and moral	1-4	L2.29	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v102	39	r2.gc39	predict events	1-4	L2.30	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v103	40	r2.gc40	research investigate	1-4	L2.31	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v104	41	r2.gc41	self confidence	1-4	L2.32	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v105	42	r2.gc42	imagination	1-4	L2.33	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v106	43	r2.gc43	self evaluation	1-4	L2.34	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v107	44	r2.gc44	help others	1-4	L2.35	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v108	45	r2.gc45	current issues	1-4	L2.36	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v109	46	r2.gc46	specific facts	1-4	L2.37	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v110	47	r2.gc47	stimulate learning	1-4	L2.38	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v111	48	r2.gc48	work for causes	1-4	L2.39	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v112	49	r2.gc49	effective decisions	1-4	L2.40	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v113	50	r2.gc50	debate issues	1-4	L2.41	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v114	51	r2.gc51	gain information	1-4	L2.42	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v115	52	r2.gc52	interpret evidence	1-4	L2.43	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v116	53	r2.gc53	complexity of world	1-4	L2.44	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v117	54	r2.gc54	social status	1-4	L2.45	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v118	55	r2.gc55	perform credibly	1-4	L2.46	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v119	56	r2.gc56	accept challenges	1-4	L2.47	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v120	57	r2.gc57	prof or grad school	1-4	L2.48	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v121	58	r2.gc58	gain career info	1-4	L2.49	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v122	59	r2.gc59	solve problems	1-4	L2.50	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v123	60	r2.gc60	global perspective	1-4	L2.51	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v124	61	r2.gc61	skills/abilities	1-4	L2.52	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v125	62	r2.gc62	reading skills	1-4	L2.53	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v126	63	r2.gc63	electronic skills	1-4	L2.54	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v127	64	r2.gc64	consumer	1-4	L2.55	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v128	65	r2.gc65	creative talents	1-4	L2.56	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v129	66	r2.gc66	works of art	1-4	L2.57	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v130	67	r2.gc67	closer relationships	1-4	L2.58	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v131	68	r2.gc68	secure world peace	1-4	L2.59	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v132	69	r2.gc69	causes of war/peace	1-4	L2.60	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v133	70	r2.gc70	unsolved questions	1-4	L2.61	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v134	71	r2.gc71	scientific principles	1-4	L2.62	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v135	72	r2.gc72	social problems	1-4	L2.63	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v136	73	r2.gc73	have fun	1-4	L2.64	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v137	74	r2.gc74	job security	1-4	L2.65	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v138	75	r2.gc75	leisure interests	1-4	L2.66	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v139	76	r2.gc76	gender/race equity	1-4	L2.67	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v140	77	r2.gc77	enjoy film	1-4	L2.68	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v141	78	r2.gc78	numerical data	1-4	L2.69	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v142	79	r2.gc79	artistic work	1-4	L2.70	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v143	80	r2.gc80	human welfare	1-4	L2.71	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v144	81	r2.gc81	contacts for future	1-4	L2.72	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v145	82	r2.gc82	internat'l harmony	1-4	L2.73	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v146	83	r2.gc83	persuade others	1-4	L2.74	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v147	84	r2.gc84	speaking abilities	1-4	L2.75	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v148	85	r2.gc85	library facilities	1-4	L2.76	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v149	86	r2.gc86	handle stress	1-4	L2.77	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v150	87	r2.gc87	expert in field	1-4	L2.78	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v151	88	r2.gc88	investigate unknown	1-4	L2.79	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v152	89	r2.gc89	standards behavior	1-4	L2.80	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v153	90	r2.gc90	conseq technology	1-4	L3.1	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v154	91	r2.gc91	ability limitations	1-4	L3.2	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v155	92	r2.gc92	aware environment	1-4	L3.3	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v156	93	r2.gc93	succeed in business	1-4	L3.4	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v157	94	r2.gc94	leadership ability	1-4	L3.5	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v158	95	r2.gc95	decision respons.	1-4	L3.6	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v159	96	r2.gc96	culture developed	1-4	L3.7	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v160	97	r2.gc97	learn about science	1-4	L3.8	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v161	98	r2.gc98	people govern	1-4	L3.9	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v162	99	r2.gc99	happy person	1-4	L3.10	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v163	100	r2.gc100	work philosophy	1-4	L3.11	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v164	101	r2.gc101	science affects life	1-4	L3.12	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v165	102	r2.gc102	technical report	1-4	L3.13	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v166	103	r2.gc103	approp career	1-4	L3.14	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v167	104	r2.gc104	math skills	1-4	L3.15	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v168	105	r2.gc105	acquire power	1-4	L3.16	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v169	106	r2.gc106	explore ideas	1-4	L3.17	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v170	107	r2.gc107	overcome hesitancy	1-4	L3.18	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v171	108	r2.gc108	understand interests	1-4	L3.19	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v172	109	r2.gc109	improve conf in math	1-4	L3.20	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v173	110	r2.gc110	enjoy music	1-4	L3.21	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v174	111	r2.gc111	_____	1-4	L3.22	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v175	112	r2.gc112	_____	1-4	L3.23	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v176	113	r2.gc113	_____	1-4	L3.24	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v177	114	r2.gc114	_____	1-4	L3.25	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v178	115	r2.gc115	_____	1-4	L3.26	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v179	116	r2.gc116	_ _ _ _ _ _ _ _ _	1-4	L3.27	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v180	117	r2.gc117	_ _ _ _ _ _ _ _ _	1-4	L3.28	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v181	118	r2.gc118	_ _ _ _ _ _ _ _ _	1-4	L3.29	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v182	119	r2.gc119	_ _ _ _ _ _ _ _ _	1-4	L3.30	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v183	120	r2.gc120	_ _ _ _ _ _ _ _ _	1-4	L3.31	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v184	121	r2.gc121	_ _ _ _ _ _ _ _ _	1-4	L3.32	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v185	122	r2.gc122	_ _ _ _ _ _ _ _ _	1-4	L3.33	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v186	123	r2.gc123	_ _ _ _ _ _ _ _ _	1-4	L3.34	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v187	124	r2.gc124	_ _ _ _ _ _ _ _ _	1-4	L3.35	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v188	125	r2.gc125	_ _ _ _ _ _ _ _ _	1-4	L3.36	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v189	126	r2.gc126	_ _ _ _ _ _ _ _ _	1-4	L3.37	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v190	127	r2.gc127	_ _ _ _ _ _ _ _ _	1-4	L3.38	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v191	128	r2.gc128	_ _ _ _ _ _ _ _ _	1-4	L3.39	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v192	129	r2.gc129	_ _ _ _ _ _ _ _ _	1-4	L3.40	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v193	130	r2.gc130	_ _ _ _ _ _ _ _ _	1-4	L3.41	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

EXPECTATIONS/STUDY SKILLS IN THIS COURSE

v194	1	r2.ess1	consequences fail	1-4	L3.42	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v195	2	r2.ess2	impant points	1-4	L3.43	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v196	3	r2.ess3	clarify concepts	1-4	L3.44	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v197	4	r2.ess4	items can't answer	1-4	L3.45	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v198	5	r2.ess5	skim material	1-4	L3.46	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v199	6	r2.ess6	study/integ exams	1-4	L3.47	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v200	7	r2.ess7	relate readings	1-4	L3.48	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v201	8	r2.ess8	course material	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.49	F1.0
v202	9	r2.ess9	expect good grades	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.50	F1.0
v203	10	r2.ess10	fit together	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.51	F1.0
v204	11	r2.ess11	basic concepts	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.52	F1.0
v205	12	r2.ess12	expect success	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.53	F1.0
v206	13	r2.ess13	recall and relate	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.54	F1.0
v207	14	r2.ess14	don't get readings	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.55	F1.0
v208	15	r2.ess15	prefer challenge	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.56	F1.0
v209	16	r2.ess16	need encouragement	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.57	F1.0
v210	17	r2.ess17	give up easily	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.58	F1.0
v211	18	r2.ess18	good grade I do	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.59	F1.0

TYPES OF ACTIVITIES PURSUED IN THIS COURSE

v212	1	r2.tap1	read book	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.60	F1.0
v213	2	r2.tap2	detailed notes	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.61	F1.0
v214	3	r2.tap3	enjoy coursework	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.62	F1.0
v215	4	r2.tap4	apply materials	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.63	F1.0
v216	5	r2.tap5	discuss subject	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.64	F1.0
v217	6	r2.tap6	time studying	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.65	F1.0
v218	7	r2.tap7	organize materials	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.66	F1.0
v219	8	r2.tap8	memorize facts	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.67	F1.0
v220	9	r2.tap9	browse library	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.68	F1.0
v221	10	r2.tap10	research project	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.69	F1.0
v222	11	r2.tap11	told friends	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.70	F1.0

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v223	12	r2.tap12	underline points	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.71	F1.0
v224	13	r2.tap13	study four hours	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.72	F1.0
v225	14	r2.tap14	facts fit together	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.73	F1.0
v226	15	r2.tap15	read newspaper	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.74	F1.0
v227	16	r2.tap16	help student	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.75	F1.0
v228	17	r2.tap17	recommend field	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.76	F1.0
v229	18	r2.tap18	outline notes	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.77	F1.0
v230	19	r2.tap19	five hours library	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.78	F1.0
v231	20	r2.tap20	relate experience	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.79	F1.0
v232	21	r2.tap21	achieve goals	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.80	F1.0
v233	22	r2.tap22	relate other courses	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L4.1	F1.0

STUDENT INFORMATION

v234	1	r2.num	student number	1-99999	L4.2-6	F5.0
v235	2	r2.coll	college *use FICE codes or local codes* *99999=miss*	00001-99998	L4.7-11	F5.0
v236	3	r2.age	age last January	17-98 99=miss	L4.12-13	F2.0
v237	4	r2.sex	gender	1-2 1=Male 2=Female 9=miss	L4.14	F1.0
v238	5	r2.grad	HS grad year	10-98 99=miss	L4.15-16	F2.0
v239	6	r2.major	major *use HEGIS or IPEDS major codes or see attached list*	0001-9999	L4.17-20	F4.0
v240	7	r2.decl	is major declared	1-2 1=Yes 2=No 9=miss	L4.21	F1.0
v241	8	r2.cert	certain of major	1-4 1=extrem 2=quite 3=smwhat 4=not 9=miss	L4.22	F1.0

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v242	9	r2.high	highest degree	00-98 01=voc. ct. 02=AA 03=BA/BS 04=MA/MS 05= JD/LLB 06=MD/DDS 07=PhD etc 98= dknow 99=miss	L4.23-24	F2.0
v243	10	r2.occ	expected occupation *see attached list of occupations*	00-98 99=miss	L4.25-26	F2.0
v244	11	r2.occt	certain of occuptn	1-4 1=extrem 2=quite 3=smwhat 4=not 9=miss	L4.27	F1.0
v245	12	r2.prep	prep for college	1-4 1=extrem 2=quite 3=smwhat 4=not 9=miss	L4.28	F1.0
v246	13	r2.crse	courses this term	1-8 9=miss	L4.29	F1.0
v247	14	r2..empl	hours employed	00-98 99=miss	L4.30-31	F2.0
v248	15	r2.study	hours studying	00-98 99=miss	L4.32-33	F2.0
v249	16	r2.live	walking distance	1-2 1=yes 2=no 9=miss	L4.34	F1.0
v250	17	r2.sacad	satisfied academics	1-4 1=very 2=quite 3=smwht 4=not 9=miss	L4.35	F1.0
v251	18	r2.sanon	satisfied nonacad	1-4 1=very 2=quite 3=smwht 4=not 9=miss	L4.36	F1.0
v252	19	r2.drop	think of drop out	1-4 1=never 2=seldom 3=occass 4=freq 9=miss	L4.37	F1.0
v253	20	r2.infcr	influence career	1-5 1=parent 2=leisur 3=pay 4=challg 5=succd 9=miss	L4.38	F1.0
v254	21	r2.mjpln	major plan	1-5 1=none 2=disc 3=nwplan 4=newmaj 5=same 9=miss	L4.39	F1.0
v255	22	r2.crpln	career plan	1-5 1=none 2=disc 3=nwplan 4=newmaj 5=same 9=miss	L4.40	F1.0
v181	23	r2.stu1	_____	1-6	L4.41	F1.0
v182	24	r2.stu2	_____	1-6	L4.42	F1.0
v183	25	r2.stu3	_____	1-6	L4.43	F1.0
v184	26	r2.stu4	_____	1-6	L4.44	F1.0
v185	27	r2.stu5	_____	1-6	L4.45	F1.0
v186	28	r2.stu6	_____	1-6	L4.46	F1.0
v187	29	r2.stu7	_____	1-6	L4.47	F1.0
v188	30	r2.stu8	_____	1-6	L4.48	F1.0
v189	31	r2.stu9	_____	1-6	L4.49	F1.0

3. SGE VERSION IR-M CODEBOOK

Student Goals Exploration	Version IR-M	CODEBOOK	10/2/90

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
GOALS IN ATTENDING COLLEGE						
v1	1	rm.co1	world better	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L1.1	F1.0
v2	2	rm.co2	think effectively	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L1.2	F1.0
v3	3	rm.co3	achieve objectives	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L1.3	F1.0
v4	4	rm.co4	vocational goals	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L1.4	F1.0
v5	5	rm.co5	personally enrich	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L1.5	F1.0
v6	6	rm.co6	great ideas	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L1.6	F1.0
v7	7	rm.co7	clarify values	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L1.7	F1.0
GOALS IN TAKING MAJOR COURSFS						
v8		rm.field	major field	0001-9999	L1.8-11	F4.0
			use HEGIS or IPEDS major codes or attached list			
v9	1	rm.gc1	record of achieve	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.12	F1.0
v10	2	rm.gc2	new ways of seeing	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.13	F1.0
v11	3	rm.gc3	learnings sake	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.14	F1.0
v12	4	rm.gc4	weigh alternatives	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.15	F1.0
v13	5	rm.gc5	ideas fit together	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.16	F1.0
v14	6	rm.gc6	imp study skills	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.17	F1.0
v15	7	rm.gc7	diff kinds people	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.18	F1.0
v16	8	rm.gc8	broad principles	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.19	F1.0
v17	9	rm.gc9	structure knowledge	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.20	F1.0
v18	10	rm.gc10	reasoning ability	1-4 1=notimp 2=somimp 3=imp 4=essntl 9=miss	L1.21	F1.0

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v19	11	rm.gc11	scholar gain knowl	1-4	L1.22	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v20	12	rm.gc12	life of service	1-4	L1.23	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v21	13	rm.gc13	friendships	1-4	L1.24	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v22	14	rm.gc14	philosophies/cultures	1-4	L1.25	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v23	15	rm.gc15	social skills	1-4	L1.26	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v24	16	rm.gc16	work in group	1-4	L1.27	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v25	17	rm.gc17	discuss issues	1-4	L1.28	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v26	18	rm.gc18	broader vision	1-4	L1.29	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v27	19	rm.gc19	organize thoughts	1-4	L1.30	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v28	20	rm.gc20	personal independ	1-4	L1.31	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v29	21	rm.gc21	learn daily skills	1-4	L1.32	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v30	22	rm.gc22	listen effectively	1-4	L1.33	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v31	23	rm.gc23	adapt with changes	1-4	L1.34	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v32	24	rm.gc24	respect sensitivity	1-4	L1.35	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v33	25	rm.gc25	improve writing	1-4	L1.36	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v34	26	rm.gc26	informed citizen	1-4	L1.37	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v35	27	rm.gc27	philosophy of life	1-4	L1.38	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v36	28	rm.gc28	understand events	1-4	L1.39	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v37	29	rm.gc29	how things change	1-4	L1.40	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v38	30	rm.gc30	see relationships	1-4	L1.41	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v39	31	rm.gc31	draw conclusions	1-4	L1.42	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v40	32	rm.gc32	apprec indiv action	1-4	L1.43	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v41	33	rm.gc33	apply FNA to life	1-4	L1.44	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v42	34	rm.gc34	human cope w/nature	1-4	L1.45	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v43	35	rm.gc35	become broadminded	1-4	L1.46	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v44	36	rm.gc36	question experts	1-4	L1.47	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v45	37	rm.gc37	understand world	1-4	L1.48	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v46	38	rm.gc38	ethical and moral	1-4	L1.49	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v47	39	rm.gc39	predict events	1-4	L1.50	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v48	40	rm.gc40	research investigate	1-4	L1.51	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v49	41	rm.gc41	self confidence	1-4	L1.52	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v50	42	rm.gc42	imagination	1-4	L1.53	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v51	43	rm.gc43	self evaluation	1-4	L1.54	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v52	44	rm.gc44	help others	1-4	L1.55	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v53	45	rm.gc45	current issues	1-4	L1.56	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v54	46	rm.gc46	specific facts	1-4	L1.57	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v55	47	rm.gc47	stimulate learning	1-4	L1.58	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v56	48	rm.gc48	work for causes	1-4	L1.59	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v57	49	rm.gc49	effective decisions	1-4	L1.60	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v58	50	rm.gc50	debate issues	1-4	L1.61	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v59	51	rm.gc51	gain information	1-4	L1.62	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v60	52	rm.gc52	interpret evidence	1-4	L1.63	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v61	53	rm.gc53	complexity of world	1-4	L1.64	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v62	54	rm.gc54	social status	1-4	L1.65	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v63	55	rm.gc55	perform credibly	1-4	L1.66	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v64	56	rm.gc56	accept challenges	1-4	L1.67	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v65	57	rm.gc57	prof or grad school	1-4	L1.68	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v66	58	rm.gc58	gain career info	1-4	L1.69	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v67	59	rm.gc59	solve problems	1-4	L1.70	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v68	60	rm.gc60	global perspective	1-4	L1.71	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v69	61	rm.gc61	skills/abilities	1-4	L1.72	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v70	62	rm.gc62	reading skills	1-4	L1.73	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v71	63	rm.gc63	electronic skills	1-4	L1.74	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v72	64	rm.gc64	consumer	1-4	L1.75	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v73	65	rm.gc65	creative talents	1-4	L1.76	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v74	66	rm.gc66	works of art	1-4	L1.77	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v75	67	rm.gc67	closer relationships	1-4	L1.78	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v76	68	rm.gc68	secure world peace	1-4	L1.79	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v77	69	rm.gc69	cause of war/peace	1-4	L1.80	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v78	70	rm.gc70	unsolved questions	1-4	L2.1	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v79	71	rm.gc71	scientific principles	1-4	L2.2	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v80	72	rm.gc72	social problems	1-4	L2.3	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v81	73	rm.gc73	have fun	1-4	L2.4	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v82	74	rm.gc74	job security	1-4	L2.5	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v83	75	rm.gc75	leisure interests	1-4	L2.6	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v84	76	rm.gc76	gender/race equity	1-4	L2.7	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v85	77	rm.gc77	enjoy film	1-4	L2.8	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v86	78	rm.gc78	numerical data	1-4	L2.9	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

ERIC

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v87	79	rm.gc79	artistic work	1-4	L2.10	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v88	80	rm.gc80	human welfare	1-4	L2.11	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v89	81	rm.gc81	contacts for future	1-4	L2.12	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v90	82	rm.gc82	internat'l harmony	1-4	L2.13	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v91	83	rm.gc83	persuade others	1-4	L2.14	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v92	84	rm.gc84	speaking abilities	1-4	L2.15	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v93	85	rm.gc85	library facilities	1-4	L2.16	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v94	86	rm.gc86	handle stress	1-4	L2.17	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v95	87	rm.gc87	expert in field	1-4	L2.18	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v96	88	rm.gc88	investigate unknown	1-4	L2.19	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v97	89	rm.gc89	standards behavior	1-4	L2.20	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v98	90	rm.gc90	conseq technology	1-4	L2.21	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v99	91	rm.gc91	ability limitations	1-4	L2.22	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v100	92	rm.gc92	aware environment	1-4	L2.23	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v101	93	rm.gc93	succeed in business	1-4	L2.24	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v102	94	rm.gc94	leadership ability	1-4	L2.25	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v103	95	rm.gc95	decision ability	1-4	L2.26	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v104	96	rm.gc96	culture developed	1-4	L2.27	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v105	97	rm.gc97	learn about science	1-4	L2.28	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v106	98	rm.gc98	people govern	1-4	L2.29	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v107	99	rm.gc99	happy person	1-4	L2.30	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v108	100	rm.gc100	work philosophy	1-4	L2.31	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v109	101	rm.gc101	science affects life	1-4	L2.32	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v110	102	rm.gc102	technical report	1-4	L2.33	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v111	103	rm.gc103	approp career	1-4	L2.34	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v112	104	rm.gc104	math skills	1-4	L2.35	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v113	105	rm.gc105	acquire power	1-4	L2.36	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v114	106	rm.gc106	explore ideas	1-4	L2.37	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v115	107	rm.gc107	overcome hesitancy	1-4	L2.38	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v116	108	rm.gc108	understand interests	1-4	L2.39	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v117	109	rm.gc109	improve conf in math	1-4	L2.40	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v118	110	rm.gc110	enjoy music	1-4	L2.41	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v119	111	rm.gc111	_____	1-4	L2.42	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v120	112	rm.gc112	_____	1-4	L2.43	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v121	113	rm.gc113	_____	1-4	L2.44	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v122	114	rm.gc114	_____	1-4	L2.45	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v123	115	rm.gc115	_____	1-4	L2.46	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v124	116	rm.gc116	_____	1-4	L2.47	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v125	117	rm.gc117	_____	1-4	L2.48	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v126	118	rm.gc118	_____	1-4	L2.49	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v127	119	rm.gc119	_____	1-4	L2.50	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v128	120	rm.gc120	_____	1-4	L2.51	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v129	121	rm.gc121	_____	1-4	L2.52	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v130	122	rm.gc122	_____	1-4	L2.53	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v131	123	rm.gc123	_____	1-4	L2.54	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v132	124	rm.gc124	_____	1-4	L2.55	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v133	125	rm.gc125	_ _ _ _ _ _ _ _ _	1-4	L2.56	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v134	126	rm.gc126	_ _ _ _ _ _ _ _ _	1-4	L2.57	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v135	127	rm.gc127	_ _ _ _ _ _ _ _ _	1-4	L2.58	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v136	128	rm.gc128	_ _ _ _ _ _ _ _ _	1-4	L2.59	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v137	129	rm.gc129	_ _ _ _ _ _ _ _ _	1-4	L2.60	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
v138	130	rm.gc130	_ _ _ _ _ _ _ _ _	1-4	L2.61	F1.0
			1=notimp 2=somimp 3=imp 4=essntl 9=miss			
FEELINGS ABOUT STUDYING IN MAJOR						
v139	1	rm.fas1	study to get ahead	1-4	L2.62	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v140	2	rm.fas2	sense satisfaction	1-4	L2.63	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v141	3	rm.fas3	long range goals	1-4	L2.64	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v142	4	rm.fas4	daily learning tasks	1-4	L2.65	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v143	5	rm.fas5	complete expected	1-4	L2.66	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v144	6	rm.fas6	work to get grades	1-4	L2.67	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v145	7	rm.fas7	work if import.	1-4	L2.68	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v146	8	rm.fas8	clear assign.	1-4	L2.69	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v147	9	rm.fas9	short range goals	1-4	L2.70	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v148	10	rm.fas10	set own goals	1-4	L2.71	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v149	11	rm.fas11	prefer easy probs	1-4	L2.72	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v150	12	rm.fas12	work even if dull	1-4	L2.73	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v151	13	rm.fas13	relate assgn goal	1-4	L2.74	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v152	14	rm.fas14	set easier goals	1-4	L2.75	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v153	15	rm fas15	learn is exciting	1-4	L2.76	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			
v154	16	rm.fas16	plan activities	1-4	L2.77	F1.0
			1=not 2=smwhat 3=quite 4=very 9=miss			

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v155	17	rm.fas17	seldom seek advice	1-4	L2.78	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v156	18	rm.fas18	topics own choice	1-4	L2.79	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
	insert one space here				L2.80	F1.0

EXPECTATIONS/STUDY SKILLS IN MAJOR

v157	1	rm.ess1	consequences fail	1-4	L3.1	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v158	2	rm.ess2	important points	1-4	L3.2	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v159	3	rm.ess3	clarify concepts	1-4	L3.3	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v160	4	rm.ess4	items can't answer	1-4	L3.4	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v161	5	rm.ess5	skim material	1-4	L3.5	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v162	6	rm.ess6	study/integ exams	1-4	L3.6	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v163	7	rm.ess7	relate readings	1-4	L3.7	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v164	8	rm.ess8	course material	1-4	L3.8	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v165	9	rm.ess9	expect good grades	1-4	L3.9	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v166	10	rm.ess10	fit together	1-4	L3.10	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v167	11	rm.ess11	basic concepts	1-4	L3.11	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v168	12	rm.ess12	expect success	1-4	L3.12	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v169	13	rm.ess13	recall and relate	1-4	L3.13	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v170	14	rm.ess14	dont get readings	1-4	L3.14	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v171	15	rm.ess15	prefer challenge	1-4	L3.15	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v172	16	rm.ess16	need encouragement	1-4	L3.16	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v173	17	rm.ess17	give up easily	1-4	L3.17	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		
v174	18	rm.ess18	good grade I do	1-4	L3.18	F1.0
				1=not 2=smwhat 3=quite 4=very 9=miss		

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
PREFERENCES FOR MAJOR COURSE ORGANIZATION						
v175	1	rm.org1	world-based	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.19	F1.0
v176	2	rm.org2	knowledge-use	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.20	F1.0
v177	3	rm.org3	great ideas	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.21	F1.0
v178	4	rm.org4	learning-based	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.22	F1.0
v179	5	rm.org5	vocational	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.23	F1.0
v180	6	rm.org6	knowledge creation	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.24	F1.0
v181	7	rm.org7	values-based	1-4 1=not 2=smwhat 3=quite 4=very 9=miss	L3.25	F1.0
TYPES OF ACTIVITIES PURSUED IN MAJOR						
v182	1	rm.tap1	read book	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.26	F1.0
v183	2	rm.tap2	detailed notes	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.27	F1.0
v184	3	rm.tap3	enjoy coursework	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.28	F1.0
v185	4	rm.tap4	apply materials	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.29	F1.0
v186	5	rm.tap5	discuss subject	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.30	F1.0
v187	6	rm.tap6	time studying	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.31	F1.0
v188	7	rm.tap7	organize materials	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.32	F1.0
v189	8	rm.tap8	memorize facts	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.33	F1.0
v190	9	rm.tap9	browse library	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.34	F1.0
v191	10	rm.tap10	research project	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.35	F1.0
v192	11	rm.tap11	told friends	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.36	F1.0
v193	12	rm.tap12	underline points	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.37	F1.0
v194	13	rm.tap13	study four hours	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.38	F1.0
v195	14	rm.tap14	facts fit together	1-4 1=never 2=rare 3=smtime 4=often 9=miss	L3.39	F1.0

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v196	15	rm.tap15	read newspaper	1-4	L3.40	F1.0
				1=never 2=rare 3=smtime 4=often 9=miss		
v197	16	rm.tap16	help student	1-4	L3.41	F1.0
				1=never 2=rare 3=smtime 4=often 9=miss		
v198	17	rm.tap17	recommend field	1-4	L3.42	F1.0
				1=never 2=rare 3=smtime 4=often 9=miss		
v199	18	rm.tap18	outline notes	1-4	L3.43	F1.0
				1=never 2=rare 3=smtime 4=often 9=miss		
v200	19	rm.tap19	five hours library	1-4	L3.44	F1.0
				1=never 2=rare 3=smtime 4=often 9=miss		
v201	20	rm.tap20	relate experience	1-4	L3.45	F1.0
				1=never 2=rare 3=smtime 4=often 9=miss		
v202	21	rm.tap21	achieve goals	1-4	L3.46	F1.0
				1=never 2=rare 3=smtime 4=often 9=miss		
v203	22	rm.tap22	relate other courses	1-4	L3.47	F1.0
				1=never 2=rare 3=smtime 4=often 9=miss		
STUDENT INFORMATION						
v204	1	rm.num	student number	1-99999	L3.48-52	F5.0
v205	2	rm.coll	name of college	00001-99998	L3.53-57	F5.0
			use FICE codes or local codes			
			99999=miss			
v206	3	rm.major	major	0001-9999	L3.58-61	F4.0
			refer to attached list of HEGIS or IPEDS major codes			
v207	4	rm.cert	cert of major	1-4	L3.62	F1.0
				1=extrem 2=quite 3=smwhat 4=not 9=miss		
v208	5	rm.mjpln	major plan	1-5	L3.63	F1.0
				1=none 2=disc 3=nwplan 4=newmaj 5=same 9=miss		
v209	6	rm.high	highest degree	00-98	L3.64-65	F2.0
				01=voc. ct. 02=AA 03=BA/BS 04=MA/MS		
				05=JD/LLB 06=MD/DDS 07=PhD etc		
				98=dknow 99=miss		
v210	7	rm.occ	expected occupation	00-98	L3.66-67	F2.0
			see attached list			
				99=miss		
v211	8	rm.occt	certain of occuptn	1-4	L3.68	F1.0
				1=extrem 2=quite 3=smwhat 4=not 9=miss		
v212	9	rm.crpln	career plan	1-5	L3.69	F1.0
				1=none 2=disc 3=nwplan 4=newmaj 5=same 9=miss		
v213	10	rm.prep	prep for college	1-4	L3.70	F1.0
				1=extrem 2=quite 3=smwhat 4=not 9=miss		

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v214	11	rm.crse	courses this term	1-8 9=miss	L3.71	F1.0
v215	12	rm..empl	hours employed	00-98 99=miss	L3.72-73	F2.0
v216	13	rm.study	hours studying	00-98 99=miss	L3.74-75	F2.0
	insert 5 spaces here				L76-80	F5.0
v217	14.1	rm.comm	comm credits	0-99	L4.1-2	F2.0
v218	14.2	rm.liter	lit credits	0-99	L4.3-4	F2.0
v219	14.3	rm.arts	arts credits	0-99	L4.5-6	F2.0
v220	14.4	rm.sci	bio and sci credits	0-99	L4.7-8	F2.0
v221	14.5	rm.math	mathetc credits	0-99	L4.9-10	F2.0
v222	14.6	rm.soc	socialsci credits	0-99	L4.11-12	F2.0
v223	14.7	rm.hum	humanit credits	0-99	L4.13-14	F2.0
v224	14.8	rm.hist	history credits	0-99	L4.15-16	F2.0
v225	14.9	rm.frgn	forlanguage credits	0-99	L4.17-18	F2.0
v226	14.10	rm.busin	business credits	0-99	L4.19-20	F2.0
v227	14.11	rm.voc	voc/trade credits	0-99	L4.21-22	F2.0
v228	14.12	rm.prof	prof credits	0-99	L4.23-24	F2.0
v229	14.13	rm.other	other credits	0-99	L4.25-26	F2.0
v230	15	rm.clgpa	college gpa	1-7 1=D 2=C- 3=C 4=C+/B- 5=B 6=B+/A- 7=A 9=miss	L4.27	F1.0
v231	16	rm.live	walking distance	1-2 1=yes 2=no 9=miss	L4.28	F1.0
v232	17	rm.facol	father attend college?	1-2 1=yes 2=no 9=miss	L4.29	F1.0
v233	18	rm.fgrad	father college grad?	1-2 1=yes 2=no 9=miss	L4.30	F1.0
v234	19	rm.mocol	mother attend college?	1-2 1=yes 2=no 9=miss	L4.31	F1.0
v235	20	rm.mgrad	mother college grad?	1-2 1=yes 2=no 9=miss	L4.32	F1.0
v236	21	rm.sacad	satisfied academics	1-4 1=very 2=quite 3=smwht 4=not 9=miss	L4.33	F1.0
v237	22	rm.sanon	satisfied nonacad	1-4 1=very 2=quite 3=smwht 4=not 9=miss	L4.34	F1.0
v238	23	rm.prog	major progress	1-4 1=very 2=quite 3=smwht 4=not 9=miss	L4.35	F1.0
v239	24	rm.drop	think of drop out	1-4 1=never 2=seldom 3=occass 4=freq 9=miss	L4.36	F1.0
v240	25	rm.age	age last January	17-98 99=miss	L4.37-38	F2.0

Var. No.	Item No.	Label Name	Value Labels	Permitted Values	Column Number	Form
v241	26	rm.sex	gender	1-2 1=Male 2=Female 9=miss	L4.39	F1.0
v242	27	rm.ethn	ethnic background	1-5 1=White 2=Black 3=Hispan 4=NatAm 5=Asian 9=miss	L4.40	F1.0
v243	28	rm.year	year in college	1-4 1=fresh 2=soph 3=jr 4=sr 9=miss	L4.41	F1.0
v244	29	rm.grad	HS grad year	10-98 99=miss	L4.42-43	F2.0
v245	30	rm.stu1	_____	1-6	L4.44	F1.0
v246	31	rm.stu2	_____	1-6	L4.45	F1.0
v247	32	rm.stu3	_____	1-6	L4.46	F1.0
v248	33	rm.stu4	_____	1-6	L4.47	F1.0
v249	34	rm.stu5	_____	1-6	L4.48	F1.0
v250	35	rm.stu6	_____	1-6	L4.49	F1.0
v251	36	rm.stu7	_____	1-6	L4.50	F1.0
v252	37	rm.stu8	_____	1-6	L4.51	F1.0
v253	38	rm.stu9	_____	1-6	L4.52	F1.0

B. CODING SCHEMES

1. Course and Major Codes - Brief Version (Adapted From HEGIS Categories)

Course and Major Codes - Brief Version

(Adapted From HEGIS categories)

Note: This simplified list should provide sufficient codes for most undergraduate fields. In case greater detail is needed, the entire HEGIS classification is given in Appendix I-B-4. To coordinate with other college data bases, the IPEDS classification may also be used (not provided in this manual).

Agriculture, Natural Resources, Forestry		0100
Architecture, Environmental Design		0200
Biological Sciences		0400
Business		
	Business and commerce, general	0501
	Accounting	0502
	Banking and Finance	0504
	Business management or administration	0506
	Marketing, Purchasing	0509
	Real Estate	0511
	International Business	0513
	Labor and industrial relations	0516
	Other business	0599
Communications		
	Communications, general	0601
	Journalism	0602
	Media (radio/TV)	0603
	Advertising	0604
	Other communications	0699
Computer science, Information Sciences		0700
Education		
	Preschool or elementary education	0801
	Secondary teaching other than math, science, or a special subject listed below	0803
	Special education	0808
	Student personnel/counseling/guidance	0826
	Art education	0831
	Music education	0832
	Mathematics or science education	0834
	Physical education	0835
	Health education	0837
	Business education	0838
	Vocational/industrial/technical education	0839
	Other education	0899

Engineering		
	Engineering, general	0901
	Aerospace or aeronautical engineering	0902
	Bioengineering, Biomedical engineering	0905
	Chemical engineering	0906
	Civil engineering	0908
	Electrical, Electronic engineering	0909
	Mechanical engineering	0910
	Geological engineering	0911
	Industrial engineering	0913
	Other engineering	0999
Arts		
	Studio art	1002
	Art history or appreciation	1003
	Music performance	1004
	Music history or appreciation	1006
	Dramatic arts	1007
	Dance	1008
	Film, Photography	1010
	Other fine or applied arts	1099
Languages		
	Romance languages	1102
	Germanic, Slavic languages	1103
	Asian languages	1107
	Classical languages	1110
	Other languages	1199
Health professions		
	Nursing	1203
	Occupational therapy	1206
	Pharmacy	1211
	Physical therapy	1212
	Dental hygiene or dental technology	1213
	Speech pathology, Audiology	1220
	Medical technology	1223
	Other health profession	1299
Home Economics, Consumer Economics or Family Studies		1300
English or Literature		
	English, general	1501
	Literature	1502
	Comparative literature	1503
	Classical literature	1504
	Linguistics, Speech	1505
	Composition or creative writing	1507
	Other literature	1599
Philosophy		1509
Religious Studies (except Theology)		1510

Library Science	1600
Mathematics or Statistics	1700
Military Science	1800
Physical Sciences	
Physics	1902
Chemistry	1905
Astronomy, Astrophysics	1911
Atmospheric and meteorological sciences	1913
Geology, Earth sciences	1914
Other physical science	1999
Psychology	2000
Public Administration	
Public administration, general	2102
Parks and recreation	2103
Social work	2104
Law Enforcement and Corrections	2105
Other public affairs and services	2199
Social Sciences and History	
Anthropology	2202
Economics	2204
History	2205
Geography	2206
Political Science or Government	2207
Sociology	2208
International Relations	2210
Afro-American or other Minority Studies	2211
Urban Studies	2214
Other Social Sciences	2299
Area Studies (such as Asian studies, African studies, American studies)	0300
Theology	2300
Interdisciplinary Majors	4900
Undecided	9999

2. Department Codes (Adapted From HEGIS Categories)

Department Codes

(Adapted From HEGIS categories)

Note: If more appropriate, use codes from Appendix B-1 (for Courses and Majors)

CODE	DEPARTMENT
0100	Agriculture, Natural Resources
0200	Architecture, Environmental Design
0400	Biological Sciences
0500	Business and Management
0600	Communications and Journalism
0700	Computer Science, Information Sciences
0800	Education
0900	Engineering
1000	Fine and Applied Arts
1100	Foreign Languages
1201	Health Professions
1203	Nursing
1300	Home Economics
1501	English or Literature
1504	Classics
1505	Linguistics, Speech
1509	Philosophy, Religious Studies (except Theology)
1600	Library Science
1701	Mathematics
1800	Military Sciences
1902	Physics
1905	Chemistry
1911	Astronomy, Astrophysics
1914	Geology, Earth Sciences
2000	Psychology
2100	Public Affairs and Services
2202	Anthropology
2204	Economics
2205	History
2206	Geography
2207	Political Science
2208	Sociology
2210	International Relations
0300	Area Studies
2300	Theology
5999	Other

3. Codes for Expected Occupation

Codes for Expected Occupation

Note: Additional codes within each decade may be added if needed.

Artistic Occupations	
Architect	01
Artist	02
Entertainer	03
Actor	04
Interior Decorator	05
Musician	06
Other artistic	09
Business Occupations	
Accountant	10
Business Executive	11
Business Owner or Proprietor	12
Business sales, marketing or buyer	13
Industrial, labor relations, personnel	14
Executive Secretary or other clerical	15
Other business	19
Engineering, and Related Occupations	
Engineer	20
Tradesman, skilled	21
Other engineering-related	25
Mathematical Occupations	
Computer programmer	26
Statistician	27
Actuary	28
Other mathematical occupations	29
Scientific Occupations	
Laboratory technologist or technician	30
Scientific researcher	31
Conservationist	32
Other scientific, non-engineering	39
Health Occupations	
Dentist	40
Dietician	41
Medical Technologist	42
Nurse	43

Optometrist	44
Pharmacist	45
Physician	46
Therapist (physical, occupational, or speech)	47
Veterinarian	48
Other health-related	49
Teaching Occupations	
Preschool or elementary teacher	50
Secondary Teacher	51
School Counselor	52
Librarian	53
School Administrator	54
College Teacher	55
Other education-related	59
Literary and Communication Occupations	
Writer	60
Interpreter	61
Journalist	62
Media worker	63
Other communication-related	69
Social/Political or Public Affairs Occupations	
Foreign Service	70
Lawyer or Judge	71
Law Enforcement Officer	72
Other social/political or public affairs	75
Social/Behavioral or Human Services Occupations	
Clinical psychologist	76
Social Worker	77
Clergy	78
Other human services	79
Other occupations	
Farmer/ Rancher	81
Military Service	82
Homemaker	83
Other	89
Undecided	98
Missing	99

4. HEGIS Classification

0100 AGRICULTURE and NATURAL RESOURCES

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc having to do with the production of food and management of natural fiber, plant, forest, and wildlife resources.

0101 Agriculture, general
0102 Agronomy (field crops, and crop management)
0103 Soils science (management and conservation)
0104 Animal science (husbandry)
0105 Dairy science (husbandry)
0106 Poultry science
0107 Fish, game, and wildlife management
0108 Horticulture (fruit and vegetable production)
0109 Ornamental horticulture (floriculture, nursery science)
0110 Agricultural and farm management
0111 Agricultural economics
0112 Agricultural business
0113 Food science and technology
0114 Forestry
0115 Natural resources management
0116 Agriculture and forestry technologies (baccalaureate and higher programs)
0117 Range management
0199 Other, specify

0200 ARCHITECTURE and ENVIRONMENTAL DESIGN

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with training for a profession in designing buildings, communities, parks, and other manmade aspects of the physiosocial environment.

0201 Environmental design, general
0202 Architecture
0203 Interior design
0204 Landscape architecture
0205 Urban architecture
0206 City, community, and regional planning
0299 Other, specify

0300 AREA STUDIES

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with programs designed to study cultures indigenous to specific geographic regions.

0301 Asian studies, general
0302 East Asian studies
0303 South Asian (India, etc.) studies
0304 Southeast Asian studies
0305 African studies
0306 Islamic studies
0307 Russian and Slavic studies
0308 Latin American studies
0309 Middle Eastern studies
0310 European studies, general
0311 Eastern European studies
0312 West European studies
0313 American studies
0314 Pacific area studies
0399 Other, specify

0400 BIOLOGICAL SCIENCES

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with the science of life or living matter in all its forms and phenomena especially with regard to the origin, growth, reproduction, and structure of life forms.

0401 Biology, general
0402 Botany, general
0403 Bacteriology
0404 Plant pathology
0405 Plant pharmacology
0406 Plant physiology
0407 Zoology, general
0408 Pathology, human and animal
0409 Pharmacology, human and animal
0410 Physiology, human and animal
0411 Microbiology
0412 Anatomy
0413 Histology
0414 Biochemistry
0415 Biophysics
0416 Molecular biology
0417 Cell biology (cytology, cell physiology)
0418 Marine biology
0419 Biometrics and biostatistics
0420 Ecology
0421 Entomology
0422 Genetics
0423 Radiobiology
0424 Nutrition, scientific (excludes nutrition in home economics and dietetics)
0425 Neurosciences
0426 Toxicology
0427 Embryology
0499 Other, specify

0500 BUSINESS and MANAGEMENT

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. related to the organization, operation, administration, and control of private and public organizations.

0501 Business and commerce, general
0502 Accounting
0503 Business statistics
0504 Banking and finance
0505 Investments and securities
0506 Business management and administration
0507 Operations research
0508 Hotel and restaurant management
0509 Marketing and purchasing
0510 Transportation and public utilities
0511 Real estate
0512 Insurance
0513 International business
0514 Secretarial studies (baccalaureate and higher programs)
0515 Personnel management
0516 Labor and industrial relations
0517 Business economics
0599 Other, specify

0600 COMMUNICATIONS

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. related to collection, preparation, and presentation of ideas and information intended for popular consumption through mass media.

0601 Communications, general
0602 Journalism (printed media)
0603 Radio/television
0604 Advertising
0605 Communication media (use of videotape, films, etc., oriented specifically toward radio/television)
0699 Other, specify

BEST COPY AVAILABLE

0700 COMPUTER and INFORMATION SCIENCES

Subject field designations which characterize students, faculty, facilities, degree programs, course work, research projects, etc having to do with the design, development, and application of computer capabilities to data storage and manipulation and related computational procedures.

0701 Computer and information sciences, general
0702 Information sciences and systems
0703 Data processing
0704 Computer programming
0705 Systems analysis
0799 Other, specify

0800 EDUCATION

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc related to administration and control of educational organizations and institutions and subjects related to instruction and services both within and outside such formal organizations

0801 general
ary education, general
0803 secondary education, general
0804 Junior high school education
0805 Higher education, general
0806 Junior and community college education
0807 Adult and continuing education
0808 Special education, general
0809 Administration of special education
0810 Education of the mentally retarded
0811 Education of the gifted
0812 Education of the deaf
0813 Education of the culturally disadvantaged
0814 Education of the visually handicapped
0815 Speech correction
0816 Education of the emotionally disturbed
0817 Remedial education
0818 Special learning disabilities
0819 Education of the physically handicapped
0820 Education of the multiple handicapped
0821 Social foundations (history and philosophy of education)
0822 Educational psychology (include learning theory)
0823 Pre-elementary education (kindergarten)
0824 Educational statistics and research
0825 Educational testing, evaluation and measurement
0826 Student personnel (counseling and guidance)
0827 Educational administration
0828 Educational supervision
0829 Curriculum and instruction
0830 Reading education (methodology and theory)
0831 Art education (methodology and theory)
0832 Music education (methodology and theory)
0833 Mathematics education (methodology and theory)
0834 Science education (methodology and theory)
0835 Physical education
0836 Driver and safety education
0837 Health education (include family life education)
0838 Business, commerce, and distributive education
0839 Industrial arts, vocational, and technical education
0899 Other, specify

0900 ENGINEERING

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc having to do with the practical application of basic scientific knowledge to the design, production, and operation of systems intended to facilitate man's control and use of his natural environment

0901 Engineering, general
0902 Aerospace, aeronautical and astronautical engineering
0903 Agricultural engineering
0904 Architectural engineering
0905 Bioengineering and biomedical engineering
0906 Chemical engineering (include petroleum refining)
0907 Petroleum engineering (exclude petroleum refining)
0908 Civil, construction, and transportation engineering
0909 Electrical, electronics, and communications engineering
0910 Mechanical engineering
0911 Geological engineering
0912 Geophysical engineering
0913 Industrial and management engineering
0914 Metallurgical engineering
0915 Materials engineering
0916 Ceramic engineering
0917 Textile engineering
0918 Mining and mineral engineering
0919 Engineering physics
0920 Nuclear engineering
0921 Engineering mechanics
0922 Environmental and sanitary engineering
0923 Naval architecture and marine engineering
0924 Ocean engineering
0925 Engineering technologies (baccalaureate and higher programs)
0999 Other, specify

1000 FINE and APPLIED ARTS

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with the creation and appreciation of the diverse modes of communicating ideas and emotions by means of stylized, visual, and non-visual representations and symbols.

1001 Fine arts, general
1002 Art (painting, drawing, sculpture)
1003 Art history and appreciation
1004 Music (performing, composition, theory)
1005 Music (liberal arts program)
1006 Music history and appreciation (musicology)
1007 Dramatic arts
1008 Dance
1009 Applied design (ceramics, weaving, textile design, fashion design, jewelry, metalsmithing, interior decoration, commercial art)
1010 Cinematography
1011 Photography
1099 Other, specify

1100 FOREIGN LANGUAGES

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. related to mastery of a language other than English or related to the study of a foreign culture through exploration of the literature of that culture as expressed in the vernacular language.

1101 Foreign languages, general (includes concentration on more than one foreign language without major emphasis on one language)
1102 French
1103 German
1104 Italian
1105 Spanish
1106 Russian
1107 Chinese

1108 Japanese
1109 Latin
1110 Greek, classical
1111 Hebrew
1112 Arabic
1113 Indian (Asiatic)
1114 Scandinavian languages
1115 Slavic languages (other than Russian)
1116 African languages (non-Semitic)
1199 Other, specify

1200 HEALTH PROFESSIONS

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with the maintenance and restoration of physical and mental health.

1201 Health professions, general
1202 Hospital and health care administration
1203 Nursing (baccalaureate and higher programs)
1204 Dentistry, D.D.S. or D.M.D. degree
1205 Dental specialties (work beyond first-professional degree, D.D.S. or D.M.D.)
1206 Medicine, M.D. degree
1207 Medical specialties (work beyond first-professional degree, M.D.)
1208 Occupational therapy
1209 Optometry
1210 Osteopathic medicine, D.O. degree
1211 Pharmacy
1212 Physical therapy
1213 Dental hygiene (baccalaureate and higher programs)
1214 Public health
1215 Medical record librarianship
1216 Podiatry (Pod.D. or D.P.) or podiatric medicine (D.P.M.)
1217 Biomedical communication
1218 Veterinary medicine (D.V.M. degree)
1219 Veterinary medicine specialties (work beyond first-professional degree, D.V.M.)
1220 Speech pathology and audiology
1221 Chiropractic
1222 Clinical social work (medical and psychiatric and specialized rehabilitation services)
1223 Medical laboratory technologies (baccalaureate and higher programs)
1224 Dental technologies (baccalaureate and higher programs)
1225 Radiologic technologies (baccalaureate and higher programs)
1299 Other, specify

1300 HOME ECONOMICS

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with the theory and practice of family and home care including the science of foods, home decoration and management, and child care.

1301 Home economics, general
1302 Home decoration and home equipment
1303 Clothing and textiles
1304 Consumer economics and home management
1305 Family relations and child development
1306 Foods and nutrition (include dietetics)
1307 Institutional management and cafeteria management
1399 Other, specify

1400 LAW

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with instruction in the legal customs, practices, and rules of society and states for the purpose of pursuing a career in jurisprudence.

1401 Law, general
1499 Other, specify

1500 LETTERS

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc having to do with English language and literature and value systems related to ancient and modern cultures.

1501 English, general
1502 Literature, English
1503 Comparative literature
1504 Classics
1505 Linguistics (include phonetics, semantics, and philology)
1506 Speech, debate, and forensic science (rhetoric and public address)
1507 Creative writing
1508 Teaching of English as a foreign language
1509 Philosophy
1510 Religious studies (exclude theological professions)
1599 Other, specify

1600 LIBRARY SCIENCE

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with instruction in the professional skills required to organize collections of books and related materials and the training necessary for providing services related to them.

1601 Library science, general
1699 Other, specify

1700 MATHEMATICS

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc having to do with the science of numbers and space configurations and their operations, measurement, relationships, and abstractions.

1701 Mathematics, general
1702 Statistics, mathematical and theoretical
1703 Applied mathematics
1799 Other, specify

1800 MILITARY SCIENCES

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with techniques and skills unique to the pursuit of a professional career as a military officer.

1801 Military science (Army)
1802 Naval science (Navy, Marines)
1803 Aerospace science (Air Force)
1899 Other, specify

1900 PHYSICAL SCIENCES

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with the basic nature of matter, energy, and associated phenomena.

1901 Physical sciences, general
1902 Physics, general (exclude biophysics)
1903 Molecular physics
1904 Nuclear physics

BEST COPY AVAILABLE

1905 Chemistry, general (exclude biochemistry)
1906 Inorganic chemistry
1907 Organic chemistry
1908 Physical chemistry
1909 Analytical chemistry
1910 Pharmaceutical chemistry
1911 Astronomy
1912 Astrophysics
1913 Atmospheric sciences and meteorology
1914 Geology
1915 Geochemistry
1916 Geophysics and seismology
1917 Earth sciences, general
1918 Paleontology
1919 Oceanography
1920 Metallurgy
1999 Other, specify

2000 PSYCHOLOGY

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with behavioral and mental processes.

2001 Psychology, general
2002 Experimental psychology (animal and human)
2003 Clinical psychology
2004 Psychology for counseling
2005 Social psychology
2006 Psychometrics
2007 Statistics in psychology
2008 Industrial psychology
2009 Developmental psychology
2010 Physiological psychology
2099 Other, specify

2100 PUBLIC AFFAIRS and SERVICES

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. related to developing and improving competencies in the management and operation of governmental agencies.

2101 Community services, general
2102 Public administration
2103 Parks and recreation management
2104 Social work and helping services (other than clinical social work)
2105 Law enforcement and corrections (baccalaureate and higher programs)
2106 International public service (other than diplomatic service)
2199 Other, specify

2200 SOCIAL SCIENCES

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. having to do with all aspects of the past and present activities, conduct, interactions, and organizations of humans.

2201 Social sciences, general
2202 Anthropology
2203 Archaeology
2204 Economics
2205 History
2206 Geography
2207 Political science and government
2208 Sociology
2209 Criminology
2210 International relations
2211 Afro-American (black culture) studies
2212 American Indian cultural studies
2213 Mexican-American cultural studies
2214 Urban studies
2215 Demography
2299 Other, specify

2300 THEOLOGY

Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. related to preparation and training for a religious vocation.

2301 Theological professions, general
2302 Religious music
2303 Biblical languages
2304 Religious education
2399 Other, specify

4900 INTERDISCIPLINARY STUDIES

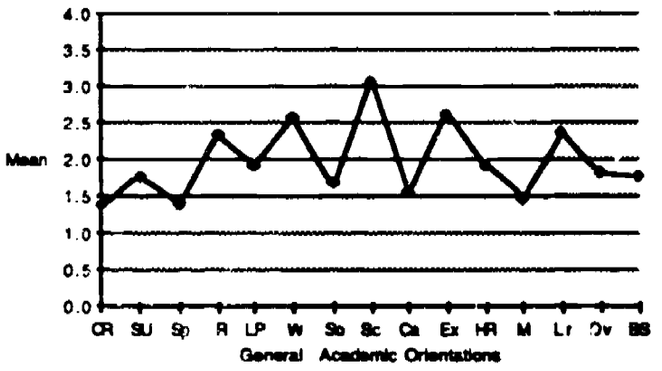
Subject field designations which characterize students, faculty, facilities, degree programs, research projects, etc. involving more than one major discipline without primary concentration in any one area.

4901 General liberal arts and sciences
4902 Biological and physical sciences
4903 Humanities and social sciences
4904 Engineering and other disciplines
4999 Other, specify

Appendix 2. Typical Group Profiles

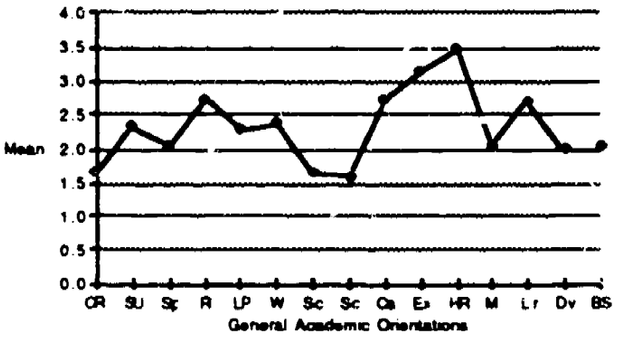
Appendix 2A. Typical Group Profiles Constructed From the Academic Orientation Scales

Biology



Version C Data N=114

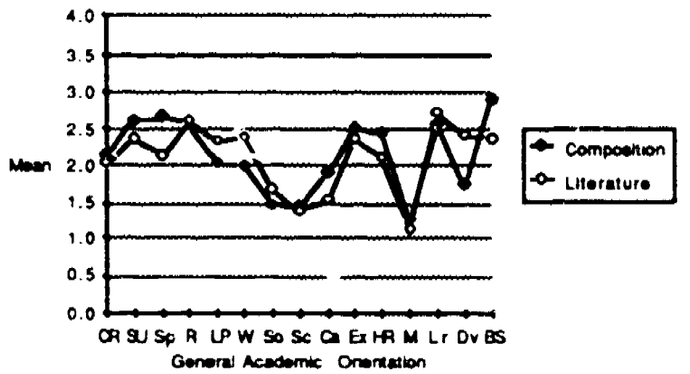
Business



Version C Data N=113

KEY TO ABBREVIATIONS	
CR	Develop creativity
SU	Increase self-understanding
Sp	Improve speaking skills
R	Improve reasoning skills
LP	Develop a life philosophy
W	Understand world around me
So	Work for social causes
Sc	Develop scientific skills
Ca	Prepare for career
Ex	Gain expertise
HR	Develop human relations
M	Improve numerical ability
Dv	Understand cultural diversity
Lr	Value learning for its own sake
BS	Improve basic skills

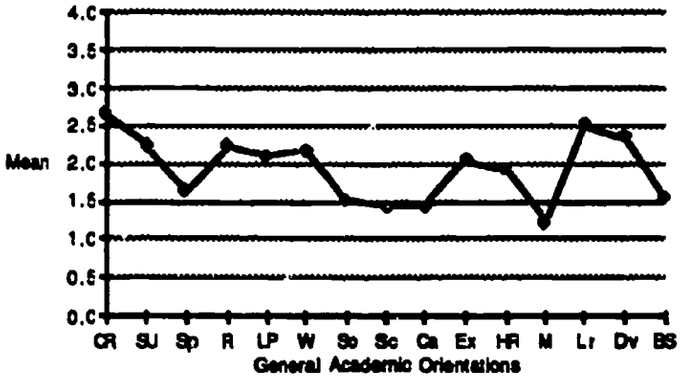
English



Version D Data N=100 for Comp; 121 for Lit

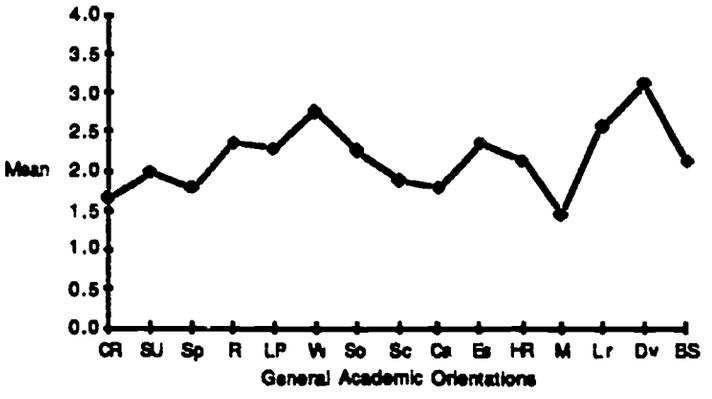
BEST COPY AVAILABLE

Fine Arts



Version C Data N=107

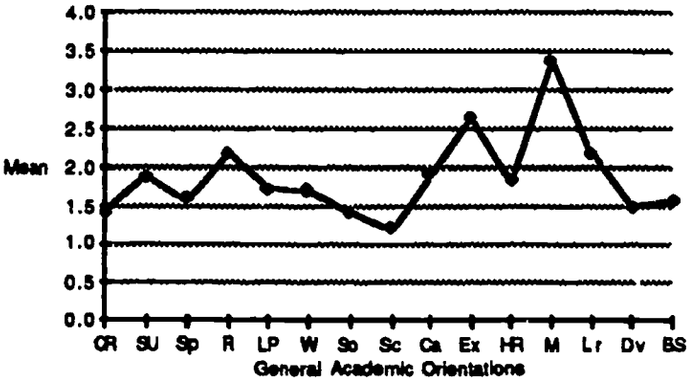
History



Version C Data N=102

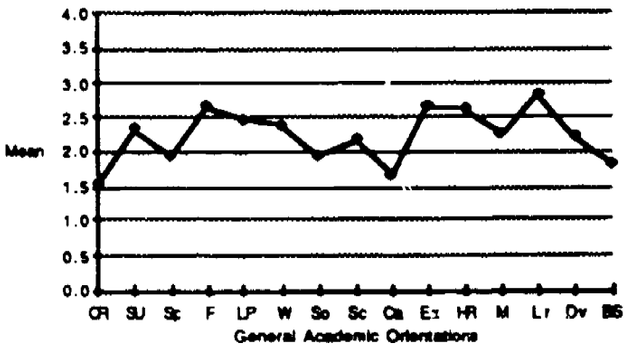
KEY TO ABBREVIATIONS	
CR	Develop creativity
SU	Increase self-understanding
Sp	Improve speaking skills
R	Improve reasoning skills
LP	Develop a life philosophy
W	Understand world around me
So	Work for social causes
Sc	Develop scientific skills
Ca	Prepare for career
Ex	Gain expertise
HR	Develop human relations
M	Improve numerical ability
Dv	Understand cultural diversity
Lr	Value learning for its own sake
BS	Improve basic skills

Mathematics



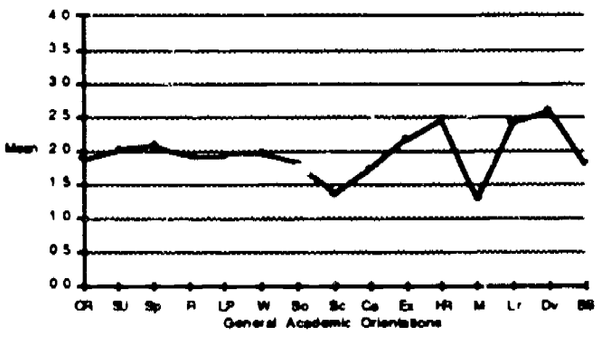
Version C Data N=106

Psychology



Version C Data N=134

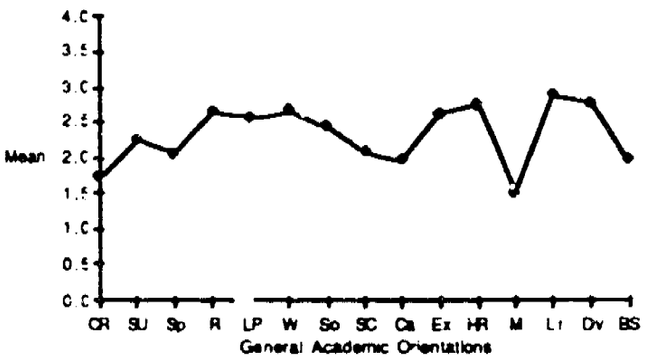
Romance Languages



Version C Data N=124

KEY TO ABBREVIATIONS	
CR	Develop creativity
SU	Increase self-understanding
Sp	Improve speaking skills
R	Improve reasoning skills
LP	Develop a life philosophy
W	Understand world around me
So	Work for social causes
Sc	Develop scientific skills
Ca	Prepare for career
Ex	Gain expertise
HR	Develop human relations
M	Improve numerical ability
Dv	Understand cultural diversity
Lr	Value learning for its own sake
BS	Improve basic skills

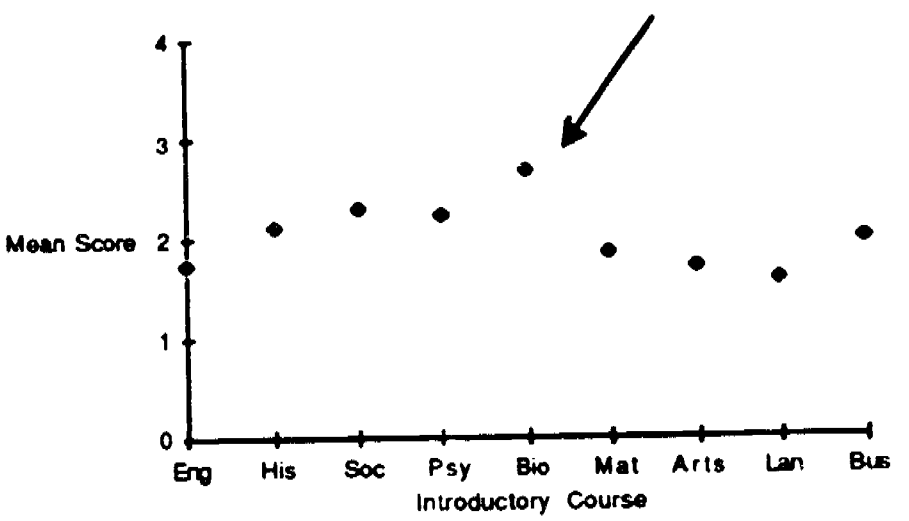
Sociology



Version C Data N=154

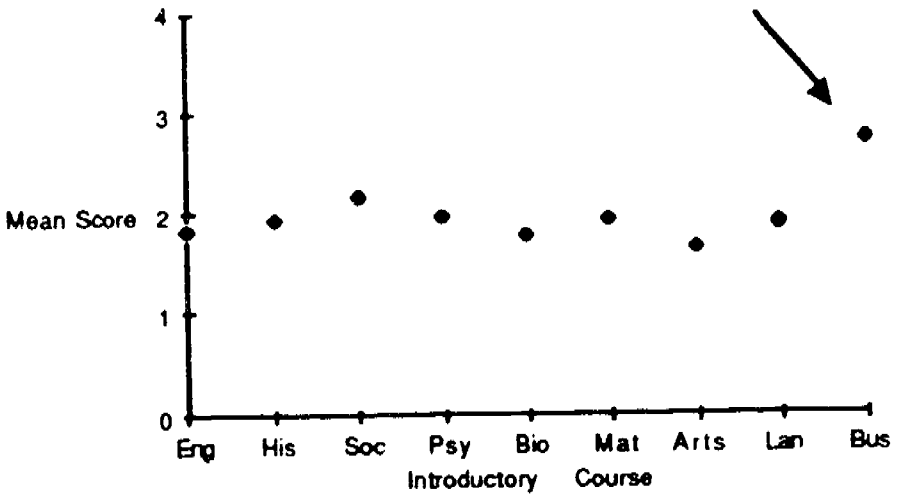
Appendix 2B. Profile Demonstration of Discriminant Validity for Subject-Specific Scales

Biology Scale



Version C Data N=1182

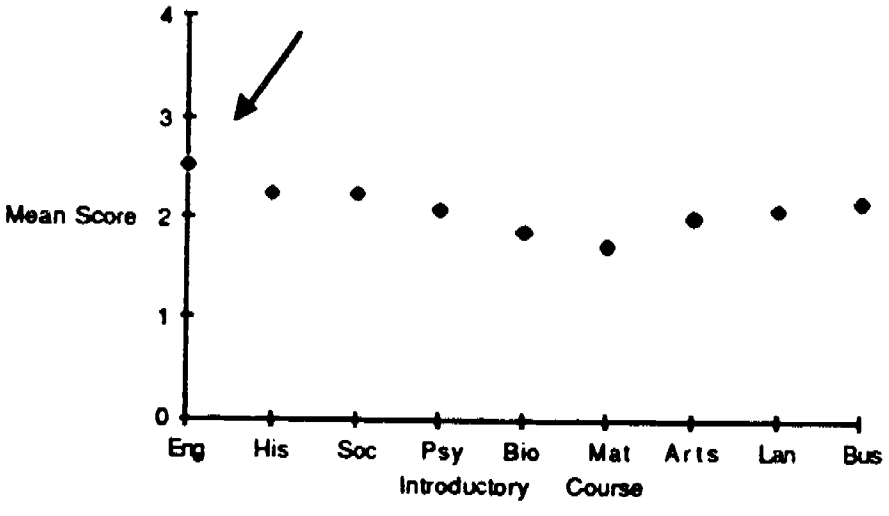
Business Scale



Version C Data N=1182

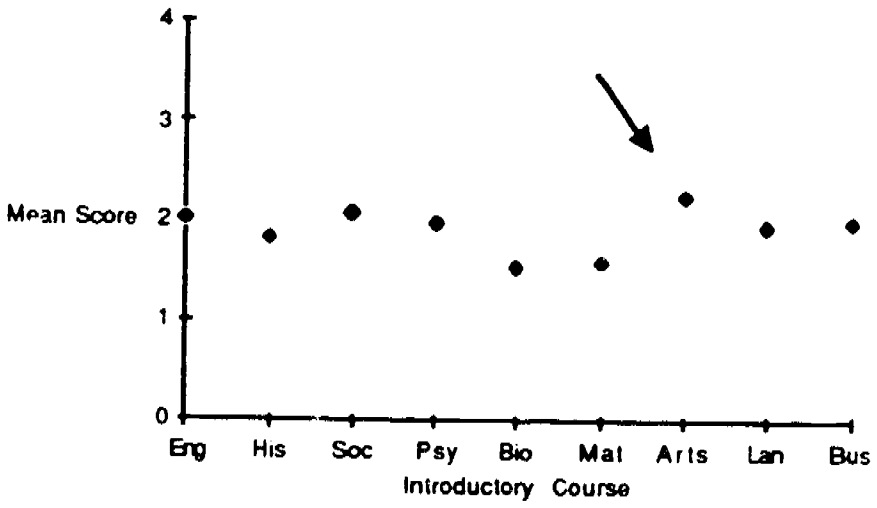
Caution: These scales are only to demonstrate that students studying the target subject score high on the scale relative to others. The only valid score is the one for the titled subject.

English Scale



Version C Data N=1182

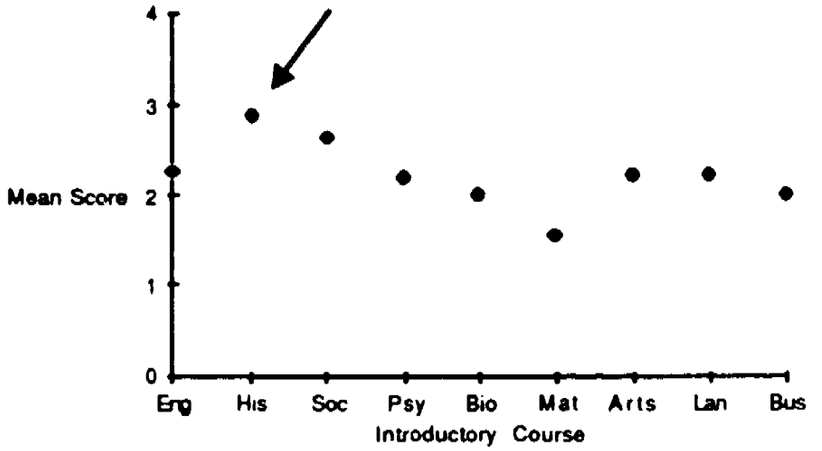
Fine Arts Scale



Version C Data N=1182

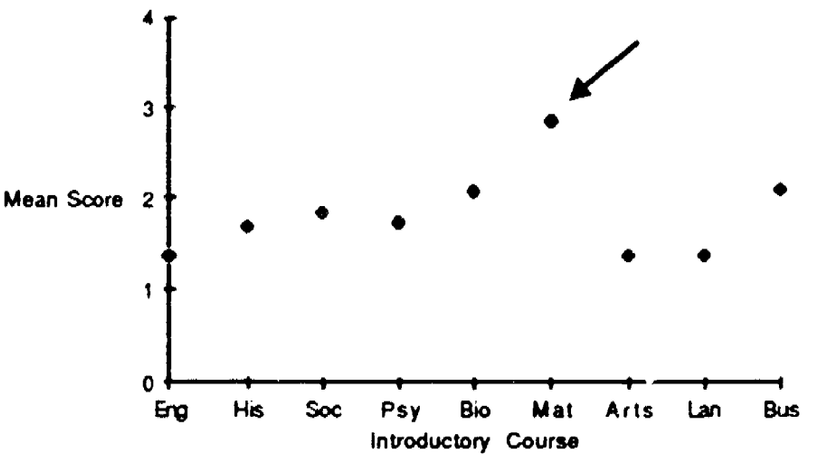
Caution: These scales are only to demonstrate that students studying the target subject score high on the scale relative to others. The only valid score is the one for the titled subject.

History Scale



Version C Data N=1182

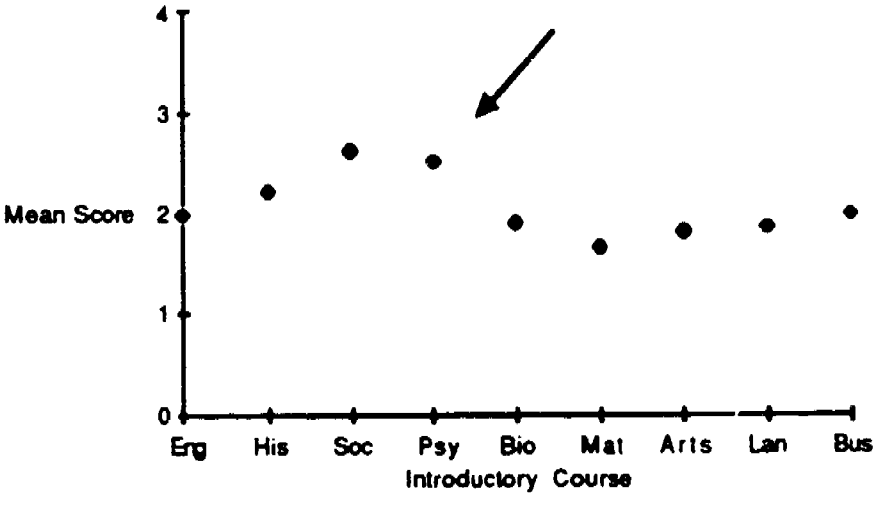
Mathematics Scale



Version C Data N=1182

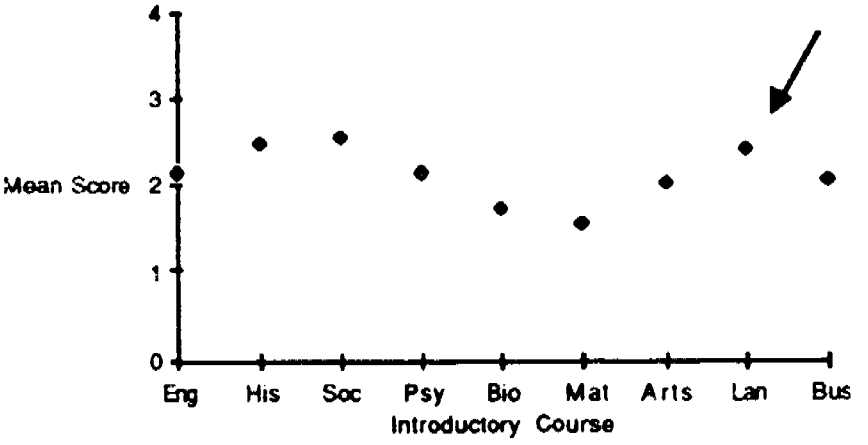
Caution: These scales are only to demonstrate that students studying the target subject score high on the scale relative to others. The only valid score is the one for the titled subject.

Psychology Scale



Version C Data N=1182

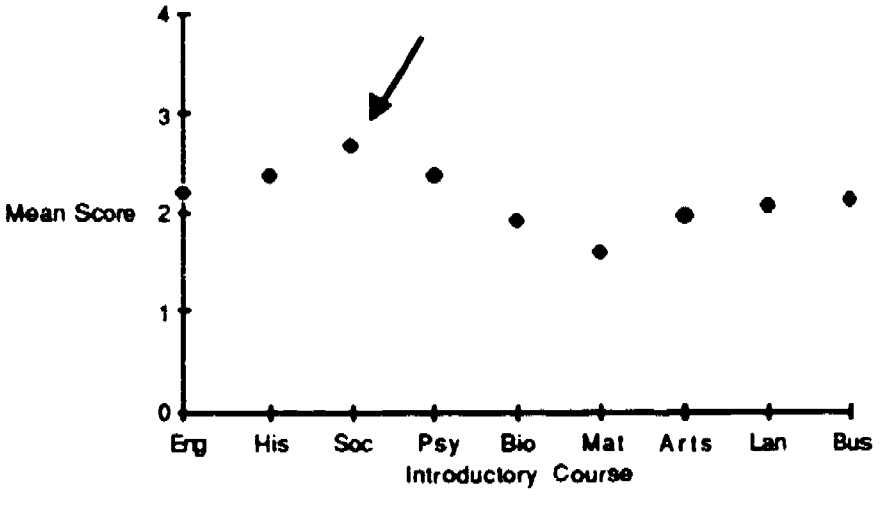
Romance Language Scale



Version C Data N=1182

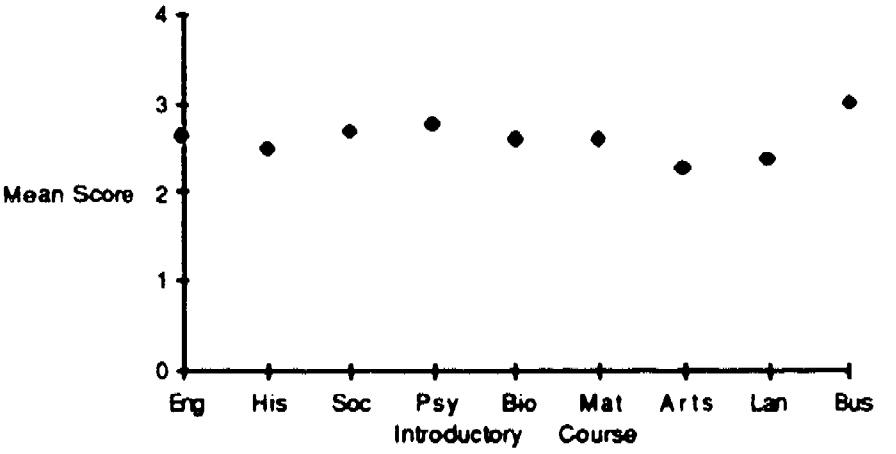
Caution: These scales are only to demonstrate that students studying the target subject score high on the scale relative to others. The only valid score is the one for the titled subject.

Sociology Scale



Version C Data N=1182

Strongly Endorsed Scale



Version C Data N=1182

Caution: These scales are only to demonstrate that students studying the target subject score high on the scale relative to others. The only valid score is the one for the titled subject.

Appendix 3. Reserve Items Pool

DISCARDED ITEM POOL

The items below were included in an early version of the SGE but were not retained for one or more reasons indicated in the code below. This pool of items may be drawn upon by users who wish to supplement the current items. Remember that students were responding with respect to their goals for a *specific course* and that a limited number of introductory courses were included.

Code for reason item was discarded:

- c common item--answered similarly by most students (see also "n" since some were not important goals)
- d duplicated (or nearly so) an item that was used
- n not important goal to students in piloted courses (may be important to faculty members, however)
- rw reworded same item in another way and included in SGE
- s space too limited to include--would have been a useful item

s, d	1-4	To read artistic critiques intelligently
d, c	1-9	To immerse myself in the world of ideas
rw	1-10	To work for a specific cause, such as world peace
s, n	1-12	To become accepted in a group
s, n	1-19	To make a contribution to scientific knowledge
d	1-20	To become an informed voter
s, n	1-28	To improve my social and economic status
s, n	1-29	To learn how to relax and enjoy life
c	1-30	To meet an appropriate life companion
s, d	1-32	To increase my organizational skills
rw	1-33	To question the opinion of authorities
rw, s	1-35	To discover new ways of doing things
d, s	1-38	To be informed about current social issues
d	1-39	To gain background and specialization for further study in a professional or scholarly field
c, n	1-41	To prepare for religious work
s	1-43	To learn to take some initiative
s, d	1-47	To learn things that will be useful in solving problems in this field
s, n	1-49	To improve my community
c, n	1-50	To improve my athletic ability
d	1-57	To understand the way this field is structured
s	1-59	To pass a certification or licensing exam
n, s	1-63	To learn to maintain my physical and mental health
s	1-64	To gain a reputation as a knowledgeable person in my field
s, d	1-67	To learn how knowledge is acquired
rw	1-69	To develop ethical and moral values
s	1-70	To make scientific judgments as an informed citizen
c	1-74	To become famous
s, n	1-77	To develop the ability to work well in group endeavors
d, rw	1-78	To understand the way scholars in this field investigate questions
rw	1-79	To get a promotion in my job
rw	1-80	To learn how to be a group leader

rw	1-82	To learn to read critically
rw	1-86	To choose between alternative actions
d	1-88	To understand the career options open to me
d, s	1-89	To learn to organize and use time effectively
d, s	1-90	To appreciate literature
n, s	1-91	To develop supervisory skills
s, n	1-97	To learn to accept criticism gracefully
s	1-100	To demonstrate to my family that I can succeed
s	1-101	To develop a commitment to careful and accurate work
rw	1-102	To meet people
s	2-3	To try to see how everything fits together logically
rw	2-5	To develop sensitivity to the feelings of others
rw	2-9	To develop intellectually
rw	2-11	To learn to fee relaxed in groups or at ease in social settings
rw	2-12	To learn to get along with others
rw	2-15	To understand the relation of literature and film to life
rw	2-16	To become more mature
s, d	2-17	To understand how human knowledge has developed
rw	2-21	To develop tolerance and understanding of other people and their views
c, n	2-24	To choose a life style
c, n	2-30	To prepare for family life
rw	2-31	To develop appreciation of varied moral and ethical standards
s, d	2-33	To gain exposure to new ideas
n, s	2-35	To help me invent new things
rw	2-40	To make sound career decisions
c, n	2-41	To increase religious devotion and commitment
rw	2-43	To develop independence or self-directedness
rw	2-44	To improve my self-image
rw	2-47	To learn to solve practical problems in my career
n, s	2-49	To help my nation
c	2-50	To develop the ability to work with my hands
d, s	2-56	To learn how to solve specific kinds of mathematics problems
rw	2-57	To understand broad trends in this field
n, s	2-65	To establish my personal identity
n, s	2-66	To develop commitment to a set of beliefs
rw	2-70	To make judgments about environmental issues as an
n	2-72	To enjoy music
n, s	2-74	To obtain recognition from others
rw	2-77	To improve my interpersonal skills
s, d	2-78	To learn the methods of analysis of this field
rw	2-81	To gain skills and techniques directly applicable to a job
c	2-84	To improve my telephone communication skills
s, n	2-87	To achieve recognition in my community
n, s	2-88	To keep all career options open
n	2-89	To learn to organize and use time effectively
rw	2-94	To understand how humans have learned to cope with nature
rw	2-96	To learn to solve complex problems

REFERENCES

Baird, L.L. (1976). *Using self-reports to predict student performance.* College Entrance Examination Board Monograph No. 7. New York: College Entrance Examination Board.

Cacioppo, J.T. and Petty, R.E. (1982). The need for cognition. *Journal of Personality and Social Psychology, 42,* 116-131.

Cacioppo, J.T., Petty, R.E. and Kao, C.F. (1984). The efficient assessment of need for cognition. *Journal of Personality Assessment, 48,* 306-307.

Cross, P.J. and Angelo, T.A. (1988). *Classroom assessment techniques: A handbook for faculty.* Ann Arbor, MI: The University of Michigan, NCRIPTAL.

Elson, J. (1981). A new instrument for assessing students' orientations towards grades and learning. *Psychological Reports, 48,* 919-924.

NCRIPTAL, Program on Curriculum: Influences and Impacts. Development of a course-specific student goals inventory: Progress report, February 1, 1989.

NCRIPTAL, Program on Curriculum: Influences and Impacts. Development of a course-specific student goals inventory: Progress report, August 15, 1989.

NCRIPTAL, Program on Curriculum: Influences and Impacts. Development of a course-specific student goals inventory: Progress report, June 28, 1990.

Pace, C.R. (1975). *Higher education measurement and evaluation kit.* Los Angeles: University of California, Laboratory for Research on Higher Education.

Pace, C.R. (1987). *CSEQ: Test manual and norms.* Los Angeles: University of California, Center for the Study of Evaluation.

Pintrich, P.R., McKeachie, W.J., Smith, D.A.F., Doljanac, R., Lin, Y., Naveh-Benjamin, M., Crooks, T. and Karabenick, S.A. (1988). *MSLQ* (Motivated Strategies for Learning Questionnaire). Ann Arbor, MI: The University of Michigan, NCRIPTAL.

Posner, G.J. and Strike, K.A. (1976). A categorization scheme for principles of sequencing content. *Review of Educational Research, 46*(4), 665-689.

Robbins, S.B. and Patton, M.J. (1985). Self-psychology and career development: Construction of the superiority and goal instability scales. *Journal of Counseling Psychology, 32,* 221-231.

Shaw, K.M., Stark, J.S., Lowther, M.A. and Wren, P.A. (1989). Development of a course-specific goals instrument. Paper prepared for Association of Institutional Research Forum, Baltimore, MD.

Shaw, K.M., Stark, J.S., Lowther, M.A. and Ryan, M.P. (1990). Students' goal change as an indicator of academic socialization in college subjects. Paper presented at the American Educational Research Association, Boston, MA.

Stark, J.S., Shaw, K.M. and Lowther, M.A. (1989). *Student goals for college and courses: A missing link in assessing and improving academic achievement.* Washington, D.C.: ASHE-ERIC Higher Education Report, No. 6.

Stark, J.S., Lowther, M.A., Bentley, R.J., Ryan, M.P., Genthon, M., Martens, G.G., Wren, P.A. and Shaw, K.M. (1990). *Planning introductory college courses: Influences on faculty.* Ann Arbor, MI: The University of Michigan, NCRIPTAL.

Stark, J.S. and Lowther, M.A. (1990). Goals in college and courses: Do business students differ from other students. Paper prepared for the Association for Institutional Research Forum, Louisville, KY.

Stark, J.S., Bentley, R.J., Lowther, M.A. and Shaw, K.M. (1990). Concurrent validity of the student goals exploration: A new instrument for assessing student course-level goals in college. (Forthcoming in *Education and Psychological Measurement.*)

ACKNOWLEDGEMENTS:

We wish to thank the following institutions for their collaboration in the development of the Student Goals Exploration and the Student Goals Exploration User's Manual:

Ball State University
Jersey City State College
Marquette University
South Dakota State University
University of Montevallo
Western Carolina University
Western Michigan University

National Center for Research to Improve Postsecondary Teaching and Learning
(NCRIPTAL)
2400 School of Education Building
University of Michigan
Ann Arbor, Michigan 48109-1259
(313) 936-2741